Profile

New York S.B. Co.
Ys. Nos. 166/7

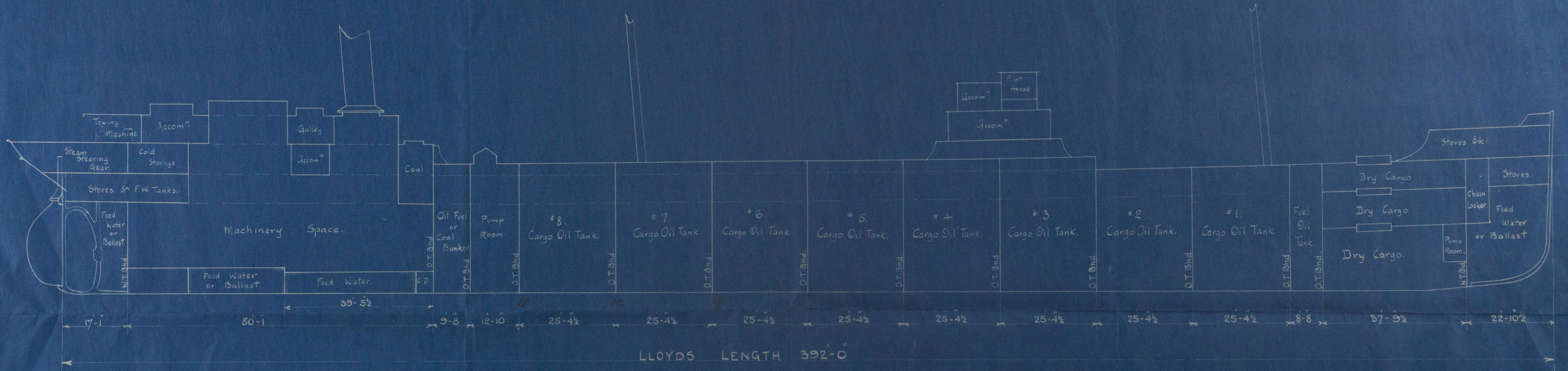
H. M. Fredrichsen
ex
No. 157. s.s. "Gulfstream".
Phila Rpt No. 267.

LLOYDS REGISTER OF SHIPPING
RECEIVED
14 DEC 1914
LONDON.

YORK SHIPBUILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM
int No. 15
ade SEP 15 191
r Dep't LLOYDS

W301-0138

ALTERATIONS.
30 Oct: 11. DISTANCE OF STEP IN DOUBLE BOTTOM, ABAFT B.R. BHD. CHANGED.


Towing Machine
Accomn.
Galley
Steam Steering Gear.
Cold Storage
Accomn.
Coal
Stores. & F.W. Tanks.
Feed Water or Ballast.
W.T. Bhd.
Machinery Space.
Feed Water or Ballast.
Feed Water.
C.D.
O.T. Bhd.
Oil Fuel or Coal Bunker.
O.T. Bhd.
Pump Room.
O.T. Bhd.
#8. Cargo Oil Tank.
O.T. Bhd.
#7. Cargo Oil Tank.
O.T. Bhd.
#6. Cargo Oil Tank.
O.T. Bhd.
#5. Cargo Oil Tank.
O.T. Bhd.
#4. Cargo Oil Tank.
O.T. Bhd.
#3. Cargo Oil Tank.
O.T. Bhd.
#2. Cargo Oil Tank.
O.T. Bhd.
#1. Cargo Oil Tank.
O.T. Bhd.
Fuel Oil Tank.
O.T. Bhd.
Pilot House
Accomn.
Accomn.
Stores Etc.
Dry Cargo
Dry Cargo
Dry Cargo.
Chain Locker.
Stores.
Feed Water or Ballast
Pump Room.
W.T. Bhd.
39'-5½"
17'-1"
80'-1"
9'-8"
12'-10"
25'-4½"
25'-4½"
25'-4½"
25'-4½"
25'-4½"
25'-4½"
25'-4½"
25'-4½"
8'-8"
37'-9½"
22'-10½"
11
10
9
LLOYDS LENGTH 392'-0"

Note:- Bulkhead Locations to be taken from this Drawing. Transverse frames to be taken from Dr. 125-202-B in relation to Bulkheads.

LLOYDS DIMENSIONS 392' × 51' × 30'-2"

1 LIB 1
2 RIGG 1
3 LYSHOLM 1
4 P. YOUNG
5 PIERCE
6 LOVEKIN
7-8 J. YOUNG
25 Oct 11
9 H.O.G.
10 BLAKE
11 KENNEDY
12 PEGG 1
26 Oct 11
13-14 [illegible] 2
[illegible] 12
15 17 LLOYDS
15 8 14

INBOARD PROFILE.
REVISED SUBDIVISION.

SCALE 1/16" = 1 FOOT. MADE BY O.E.P. DATE 25 O. 11

NEW YORK SHIPBUILDING COMPANY.
CAMDEN, NEW JERSEY, U.S.A.

Dr. 125-202-C.

E. F. Rigg NAVAL ARCHITECT.

LR Foundation
W391-0138

Lower Deck Forward

New York S.R.C. Nos 156/7/9

"Refast" ex

156 - ss. "Gulflight" Pha Rpt. No 2160

157 - ss. "Gulfstream" — — 2167

159 - ss. "Gulfcoast" — — 2239

LLOYDS REGISTER OF SHIPPI
RECEIVED
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W116-0158

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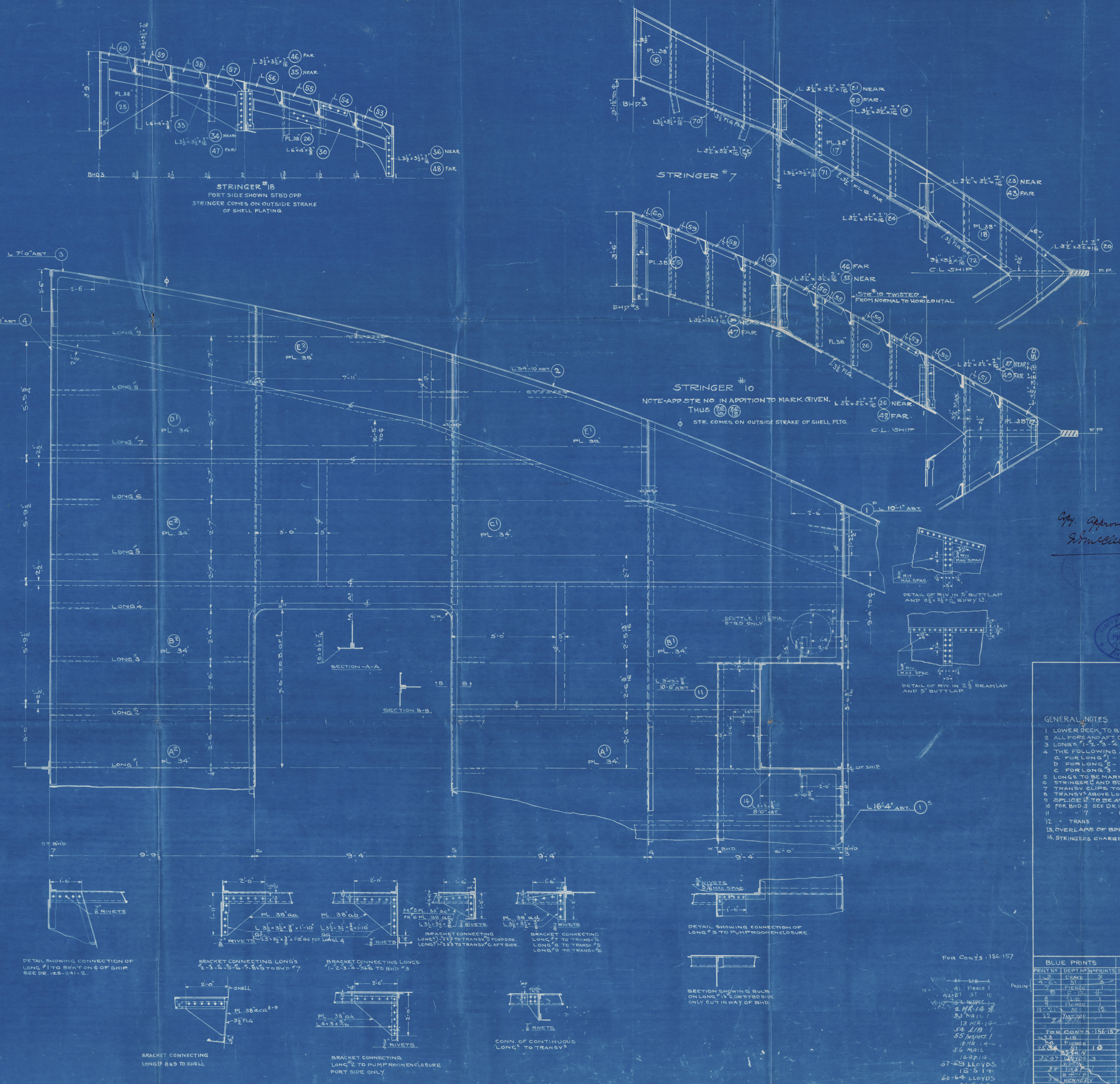
Lloyd's Register
Foundation

NEW YORK SHIPBUILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM

Print No. 61
Made SEP 21 1914
For Dep't LLOYDS

159


STRINGER #18
PORT SIDE SHOWN STBD OPP.
STRINGER COMES ON OUTSIDE STRAKE OF SHELL PLATING
STRINGER #7
STRINGER #10
NOTE-ADD STR NO IN ADDITION TO MARK GIVEN.
THUS 26/10 26/18
STR. COMES ON OUTSIDE STRAKE OF SHELL PLTG.
STR #10 TWISTED FROM NORMAL TO HORIZONTAL
C.L. SHIP
F.P.
BHD 3
LONG 1
LONG 2
LONG 3
LONG 4
LONG 5
LONG 6
LONG 7
LONG 8
LONG 9
PL 34
PL 38
SECTION A-A
SECTION B-B
SCUTTLE 1'-11" DIA STBD ONLY
O.T. BHD
W.T. BHD.
9'-9½"
9'-4"
6'-0"
DETAIL OF RIV. IN 5" BUTTLAP AND 3½×3½×7/16 BDRY L
DETAIL OF RIV. IN 2½" SEAMLAP AND 5" BUTTLAP
DETAIL SHOWING CONNECTION OF LONG. #1 TO BRKT ON ¢ OF SHIP. SEE DR. 125-241-2.
BRACKET CONNECTING LONG'S #2-#3-#4-#5-#6-#7-#8 & #9 TO BH'D. #7.
BRACKET CONNECTING LONG'S: #1-#2-#3-#4-#5 & #6 TO B'HD. #3
BRACKET CONNECTING LONG'S #1-#2 & #3 TO TRANSV. #5 FORD SIDE. LONG'S #1-#2 & #3 TO TRANSV. #6 AFT SIDE.
BRACKET CONNECTING LONG. #7 TO TRANSV. #4 LONG #8 TO TRANSV. #5 LONG #9 TO TRANSV. #6
DETAIL SHOWING CONNECTION OF LONG #3 TO PUMP ROOM ENCLOSURE.
BRACKET CONNECTING LONG'S 8 & 9 TO SHELL
BRACKET CONNECTING LONG #2 TO PUMP ROOM ENCLOSURE PORT SIDE ONLY.
CONN. OF CONTINUOUS LONG'S TO TRANSV'S
SECTION SHOWING BULB ON LONG #1 & #2 ON STBD SIDE ONLY CUT IN WAY OF B'HD.
7/8" RIVETS
3/4" RIVETS

ALTERATIONS

Nº	DESCRIPTION
1	LOCATION FOR SCUTTLE AFT OF #3 STBD SIDE ADDED.
	CONTS. 156 + 157
2.	SPLICE L'S CHANGED TO OVERLAPS
3.	STRINGERS 7.10 + 18 ADDED BET.
	FRS. 3 + F.P.
4	NOTES 13 & 14 ADDED.
5	STRINGERS ALTERED TO SUIT LLOYDS.
6	LONG L'S 8 & 9 EXTENDED & BRACKETED TO SHELL.
7	FACE L ADDED TO STRINGER #7.

NOTE - 1.		9·APR·12	MEP
"	2-3-4.	1/27/14	MEP.
"	5-6	3/2/14	MEP
"	7	16 MR 14	MEP

Copy Approved

RIVETING SCHEDULE

LOCATION	DIA RIV	MAX SPAC IN DIAS	MAX SPAC IN INCHES
LONG'S 6"×3"×3/8" L TO DK PLATING	3/4"	6.	4½"
DECK STRINGER L TO DK. PLATING	3/4"	4½.	3⅜"
W.T. BDRY L'S TO DK. PLATING	3/4"	5.	3¾"
TRANSV. CLIPS TO DK PLATING	7/8"	4½	3 15/16"
FOR OTHER RIVETING SEE DETAILS			
STRINGER #7 SHELL L	3/4	5½	4⅛"
6×4 L TO STR PL (STAG)	3/4	7	5¼"
FACE L TO STR #7	3/4	7	5¼

GENERAL NOTES

1 LOWER DECK TO BE WATERTIGHT
2 ALL FORE AND AFT DIMENSION GIVEN TO FR. LINE
3 LONG'S #1-#2-#3-#4-#5-#6-#7-#8 & #9 6"×3"×3/8" L
4 THE FOLLOWING ASSEMBLY MARKS TO BE USED IN BILLING LONG'S:
  a FOR LONG #1 - d FOR LONG #4 - h FOR LONG #7] FORD FR. Nº TO BE
  b FOR LONG #2 - f FOR LONG #5 - k FOR LONG #8 } USED IN ADDITION TO LETTER
  c FOR LONG #3 - g FOR LONG #6 - m FOR LONG #9] GIVEN THUS K5.
5 LONG'S TO BE MARKED WITH THEIR Nº OVER FOR'D AND AFT FR. Nº THUS 8/5-7
6 STRINGER L'S AND BDRY L'S TO BHD'S 3½"×3½"×7/16" EXCEPT WHERE MARKED
7 TRANSV. CLIPS TO LOWER DECK 3"×3"×3/8" EXCEPT WHERE MARKED
8 TRANSV'S ABOVE LOWER DECK CONNECTED TO LOWER DECK BY DBL. 3½"×3½"×7/16 CLIPS
9 SPLICE L'S TO BE AT LEAST 1'-6" LONG - FOR CONT 125.
10 FOR BHD 3 SEE DR 125-241-12
11 " " 7 " " 125-241-13 - FOR CONT 156/157 - DR 156-241-13.
12 " TRANS " " 125-251-3-3 - " " " DR 156-251-3-3.
13. OVERLAPS OF BDRY L'S TO BE NOT LESS THAN 12" AND TAKE 4 RIVS. - FOR CONT 156/157
14. STRINGERS CHARGED TO 251-9

FOR CONTS. 156·157

~~VOID 40 LIB 1~~
41 Pierce 1
42-51 51 10
~~VOID 52 INSPEC 1~~
2 MR·14
53 MAIL 1
13 MR-14
54 LIB 1
55 INSPECT. 1
18 MR·14
56 MAIL
14 AP 14
57-59 LLOYDS
15-5-14
60-64 LLOYDS
21-5-14

BLUE PRINTS

PRINT Nº	DEPT Nº	Nº PRINTS	SENT TO	RETURNED
1-3	DRAKE	3		
4-6	51	3		
7	PIERCE	1		
~~8~~	~~F-12~~	~~1~~		
8	LIB	1		
9	PIERCE	1		
10-21	51	12		
22	YARD INSP	1		
	24 F 12			
FOR CONTS. 156·157				
23	LIB	1		
24	PIERCE	1		
25-34	51	10		
	25 Ja 14			
35-37	LLOYDS	3		
	31 Ja 14			
38	INSP	1		
	6-F-14			
39	KENNEDY			
	20-F-14			
~~40-42~~	~~LLOYDS~~	3		
	3 MR·14			

PRELIM

HULL DEPARTMENT

LOWER DECK PLATING
FORD

SCALE ½" = 1 FOOT. DRAWN BY Th. DATE 8-F-12
TRACED BY Th. CHECKED BY [illegible] CHIEF DRAFTSMAN MEP
NEW YORK SHIPBUILDING COMPANY
CAMDEN, NEW JERSEY, U.S.A.

DR. 125-231-1-1

APPROVED [illegible]

Midship Section

New York 2436 Rpt No. 157

H. M. Fredrichsen

s. "Gulfstream" esc Pha Rpt No. 2167

Copy of approved Plan

LLOYDS REGISTER OF SHIPPING
RECEIVED
4 JUL 1915
LONDON.

W301-0136

NEW YORK SHIPBUILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM

Print No. 21
Made SEP 15 1914
For Dep't LLOYDS

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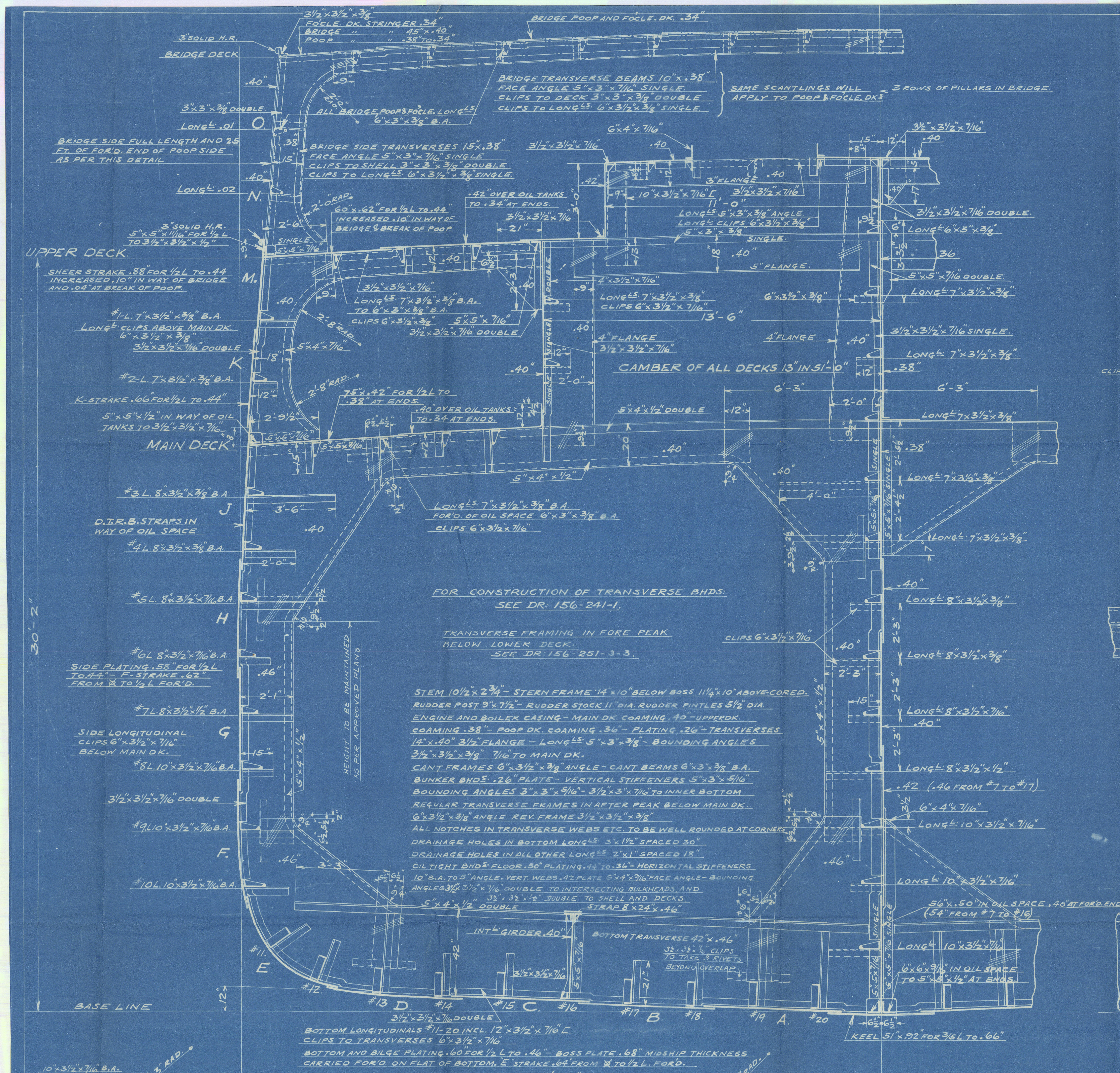
Lloyd's Register
Foundation

W301-0136

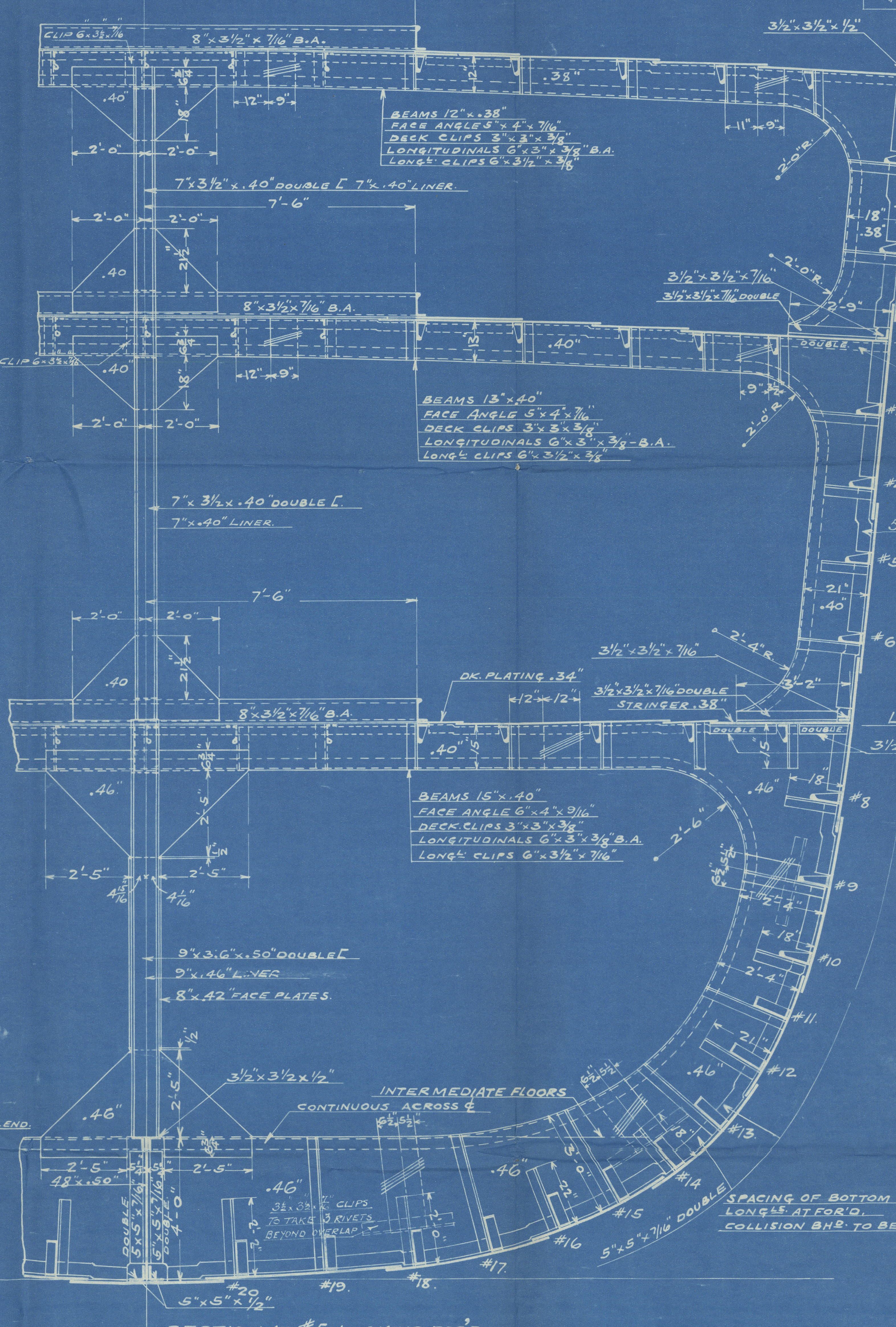

3½"x3½"x⅜"
FO'CLE. DK. STRINGER .34"
BRIDGE " " 45"x.40"
POOP " " .38" TO .34
BRIDGE POOP AND FO'CLE. DK. .34"
3" SOLID H.R.
BRIDGE DECK
.40"
3"x3"x⅜" DOUBLE.
ALL BRIDGE, POOP & FO'CLE. LONGLS. 6"x3"x⅜" B.A.
LONGL. .01
O.
BRIDGE SIDE FULL LENGTH AND 25 FT. OF FOR'D. END OF POOP SIDE AS PER THIS DETAIL
BRIDGE TRANSVERSE BEAMS 10"x.38"
FACE ANGLE 5"x3"x7/16" SINGLE.
CLIPS TO DECK 3"x3"x⅜" DOUBLE
CLIPS TO LONGLS. 6"x3½"x⅜" SINGLE.
SAME SCANTLINGS WILL APPLY TO POOP & FO'CLE. DKS.
3 ROWS OF PILLARS IN BRIDGE.
BRIDGE SIDE TRANSVERSES 15"x.38"
FACE ANGLE 5"x3"x7/16" SINGLE
CLIPS TO SHELL 3"x3"x⅜" DOUBLE
CLIPS TO LONGLS. 6"x3½"x⅜" SINGLE.
LONGL. .02
N.
.42" OVER OIL TANKS TO .34" AT ENDS.
60"x.62" FOR ½L TO .44 INCREASED .10" IN WAY OF BRIDGE & BREAK OF POOP.
3" SOLID H.R.
5"x5"x11/16" FOR ½L TO 3½"x3½"x½"
UPPER DECK.
SHEER STRAKE .88" FOR ½L TO .44 INCREASED .10" IN WAY OF BRIDGE AND .04" AT BREAK OF POOP.
M.
LONGLS. 7"x3½"x⅜" B.A. TO 6"x3"x⅜" B.A.
CLIPS 6"x3½"x⅜"
#1-L. 7"x3½"x⅜" B.A.
LONGL. CLIPS ABOVE MAIN DK. 6"x3½"x⅜"
3½"x3½"x7/16" DOUBLE
K.
#2-L. 7"x3½"x⅜" B.A.
K-STRAKE .66" FOR ½L TO .44"
75"x.42" FOR ½L TO .38" AT ENDS.
.40" OVER OIL TANKS TO .34 AT ENDS.
5"x5"x½" IN WAY OF OIL TANKS TO 3½"x3½"x7/16"
MAIN DECK
CAMBER OF ALL DECKS 13" IN 51'-0"
LONGLS. 7"x3½"x⅜" B.A. FOR'D. OF OIL SPACE 6"x3"x⅜" B.A.
CLIPS 6"x3½"x7/16"
#3 L. 8"x3½"x⅜" B.A.
J.
D.T.R.B. STRAPS IN WAY OF OIL SPACE
#4 L 8"x3½"x⅜" B.A.
#5 L. 8"x3½"x7/16" B.A.
H
HEIGHT TO BE MAINTAINED AS PER APPROVED PLANS.
#6 L 8"x3½"x7/16" B.A.
SIDE PLATING .58" FOR ½L TO .44" – F-STRAKE .62" FROM ⊗ TO ½L FOR'D.
#7 L. 8"x3½"x½" B.A.
G
SIDE LONGITUDINAL CLIPS 6"x3½"x7/16" BELOW MAIN DK.
#8 L. 10"x3½"x7/16" B.A.
3½"x3½"x7/16" DOUBLE
#9 L 10"x3½"x7/16" B.A.
F.
#10 L. 10"x3½"x7/16" B.A.
30'-2"
E.
BASE LINE
#11. #12. #13 D. #14 #15 C. #16 #17 B. #18. #19 A. #20
LONGL. 6"x3"x⅜"
LONGL. 7"x3½"x⅜"
LONGL. 8"x3½"x⅜"
LONGL. 8"x3½"x7/16"
LONGL. 8"x3½"x½"
.42 (.46 FROM #7 TO #17)
6"x4"x7/16"
LONGL. 10"x3½"x7/16"
56"x.50" IN OIL SPACE .40" AT FOR'D. END. (.54" FROM #7 TO #16)
6"x6"x9/16" IN OIL SPACE TO 5"x5"x½" AT ENDS.
INTL. GIRDER .40"
BOTTOM TRANSVERSE 42"x.46"
3½"x3½"x7/16" CLIPS TO TAKE 3 RIVETS BEYOND OVERLAP
STRAP 8"x24"x.46"
5"x4"x½" DOUBLE
3½"x3½"x7/16" DOUBLE
KEEL 51"x.92" FOR ⅗L. TO .66"
25'-6"

FOR CONSTRUCTION OF TRANSVERSE BHDS: SEE DR: 156-241-1.

TRANSVERSE FRAMING IN FORE PEAK BELOW LOWER DECK. SEE DR: 156-251-3-3.

STEM 10½"x2¾" – STERN FRAME 14"x10" BELOW BOSS 11¼"x10" ABOVE-CORED.
RUDDER POST 9"x7½" – RUDDER STOCK 11" DIA. RUDDER PINTLES 5½" DIA.
ENGINE AND BOILER CASING – MAIN DK. COAMING .40" – UPPER DK. COAMING .38" – POOP DK. COAMING .36" – PLATING .26" – TRANSVERSES 14"x.40" 3½" FLANGE – LONGLS. 5"x3"x⅜" – BOUNDING ANGLES 3½"x3½"x⅜" 7/16" TO MAIN DK.
CANT FRAMES 6"x3½"x⅜" ANGLE – CANT BEAMS 6"x3"x⅜" B.A.
BUNKER BHDS. .26" PLATE – VERTICAL STIFFENERS 5"x3"x5/16" BOUNDING ANGLES 3"x3"x5/16" – 3½"x3"x7/16" TO INNER BOTTOM
REGULAR TRANSVERSE FRAMES IN AFTER PEAK BELOW MAIN DK. 6"x3½"x⅜" ANGLE REV. FRAME 3½"x3½"x⅜"
ALL NOTCHES IN TRANSVERSE WEBS ETC. TO BE WELL ROUNDED AT CORNERS
DRAINAGE HOLES IN BOTTOM LONGLS. 3"x1½" SPACED 30"
DRAINAGE HOLES IN ALL OTHER LONGLS. 2"x1" SPACED 18"
OIL TIGHT BHDS. FLOOR .50" PLATING .44" TO .36" – HORIZONTAL STIFFENERS 10" B.A. TO 5" ANGLE. VERT. WEBS .42 PLATE 6"x4"x9/16" FACE ANGLE – BOUNDING ANGLES 3½"x3½"x7/16" DOUBLE TO INTERSECTING BULKHEADS, AND 3½"x3½"x½" DOUBLE TO SHELL AND DECKS.

BOTTOM LONGITUDINALS #11-20 INCL. 12"x3½"x7/16" [
CLIPS TO TRANSVERSES 6"x3½"x7/16"
BOTTOM AND BILGE PLATING .60" FOR ½L TO .46" – BOSS PLATE .68" MIDSHIP THICKNESS CARRIED FOR'D. ON FLAT OF BOTTOM. "E" STRAKE .64" FROM ⊗ TO ½L. FOR'D.


7'-6½"
CLIP 6x3½x7/16
8"x3½"x7/16" B.A.
.38"
BEAMS 12"x.38"
FACE ANGLE 5"x4"x7/16"
DECK CLIPS 3"x3"x⅜"
LONGITUDINALS 6"x3"x⅜" B.A.
LONGL. CLIPS 6"x3½"x⅜"
3½"x3½"x½"
UPPER DECK.
2'-0"R.
#1.
5"x5"x7/16" SINGLE.
7"x3½"x.40" DOUBLE [7"x.40" LINER.
7'-6"
#2
3½"x3½"x7/16"
3½"x3½"x7/16" DOUBLE
2'-9"
MAIN DECK.
3½"x3"x⅜"
BEAMS 13"x.40"
FACE ANGLE 5"x4"x7/16"
DECK CLIPS 3"x3"x⅜"
LONGITUDINALS 6"x3"x⅜" – B.A.
LONGL. CLIPS 6"x3½"x⅜"
#3.
7"x3½x.40" DOUBLE [.
7"x.40" LINER.
#4.
5x5x7/16" SINGLE
#5
#6
2'-4"R.
DK. PLATING .34"
3½"x3½"x7/16" DOUBLE STRINGER .38"
LOWER DECK.
3½"x3"x⅜"
BEAMS 15"x.40"
FACE ANGLE 6"x4"x9/16"
DECK CLIPS 3"x3"x⅜"
LONGITUDINALS 6"x3"x⅜" B.A.
LONGL. CLIPS 6"x3½"x7/16"
#8
#9
9"x3.6"x.50" DOUBLE [
9"x.46" LINER
8"x.42" FACE PLATES.
#10
#11.
3½"x3½x½"
INTERMEDIATE FLOORS CONTINUOUS ACROSS ℄
#12
#13.
48"x.50"
3½x3½x7/16" CLIPS TO TAKE 3 RIVETS BEYOND OVERLAP
#14
#15
#16
#17.
#18.
#19.
#20
5"x5"x½"
5"x5"x7/16" DOUBLE
SPACING OF BOTTOM LONGLS. AT FOR'D. COLLISION BHD. TO BE 21"

SECTION AT #5 LOOKING FOR'D.

SKETCH OF FORE PEAK TO BE SUBMITTED.

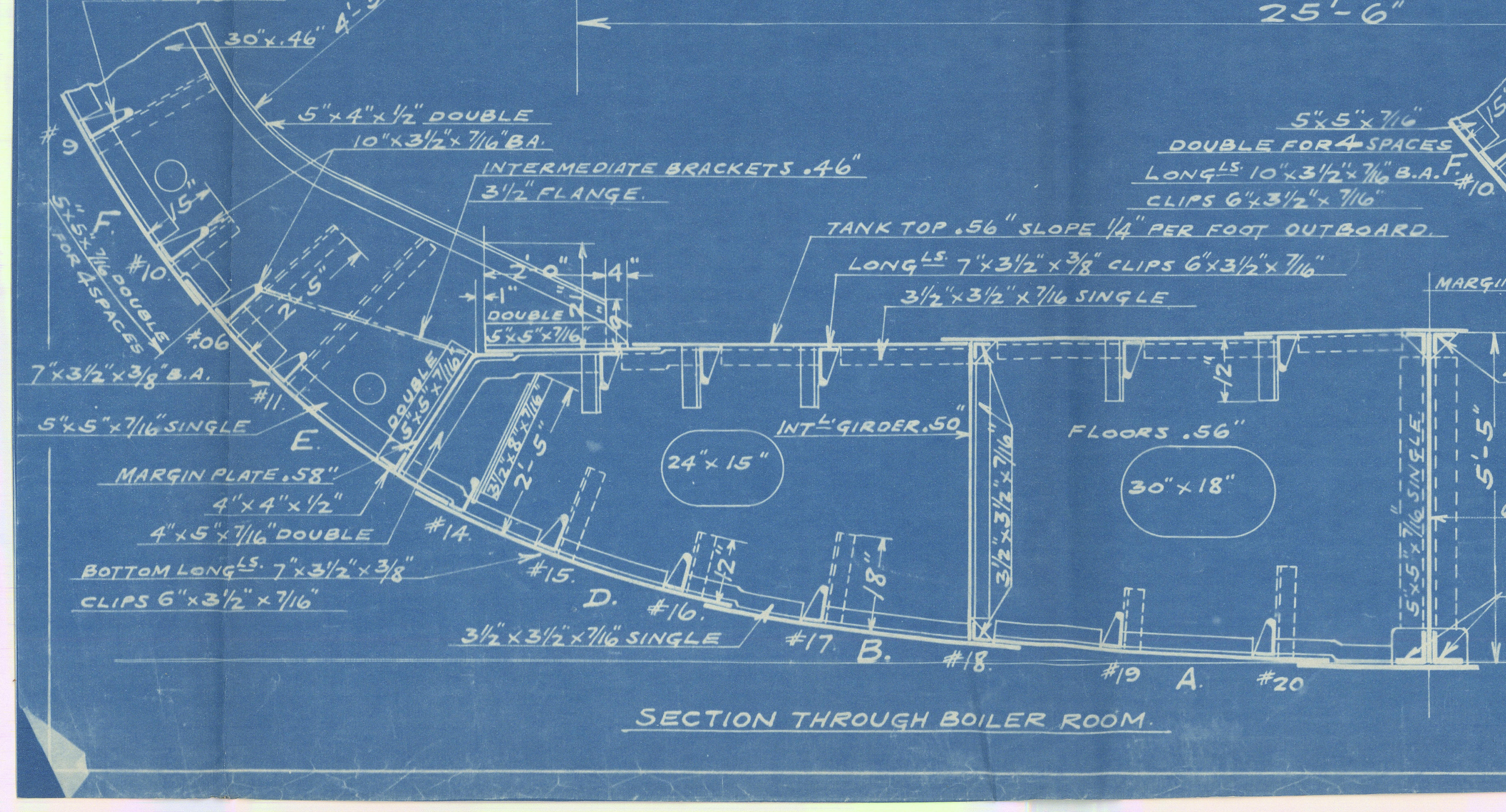
DATE.	ALTERATIONS.
9 Feb.'14	LLOYDS' AMENDMENTS
	INCORPORATED. FOR DETAILS
	SEE RECORD PRINT ON FILE.
10 Feb.'14	RIVETING NOTES, LINES #23, #34,
	#35, #36 & #37 MODIFIED.
12 Mar.'14	STANCHION ON ℄ AT SECT #5 MODIFIED.
"	TOP BOUNDING ANGLES ON ℄ BHD. CHANGED.

LIST OF SCANTLINGS USED.

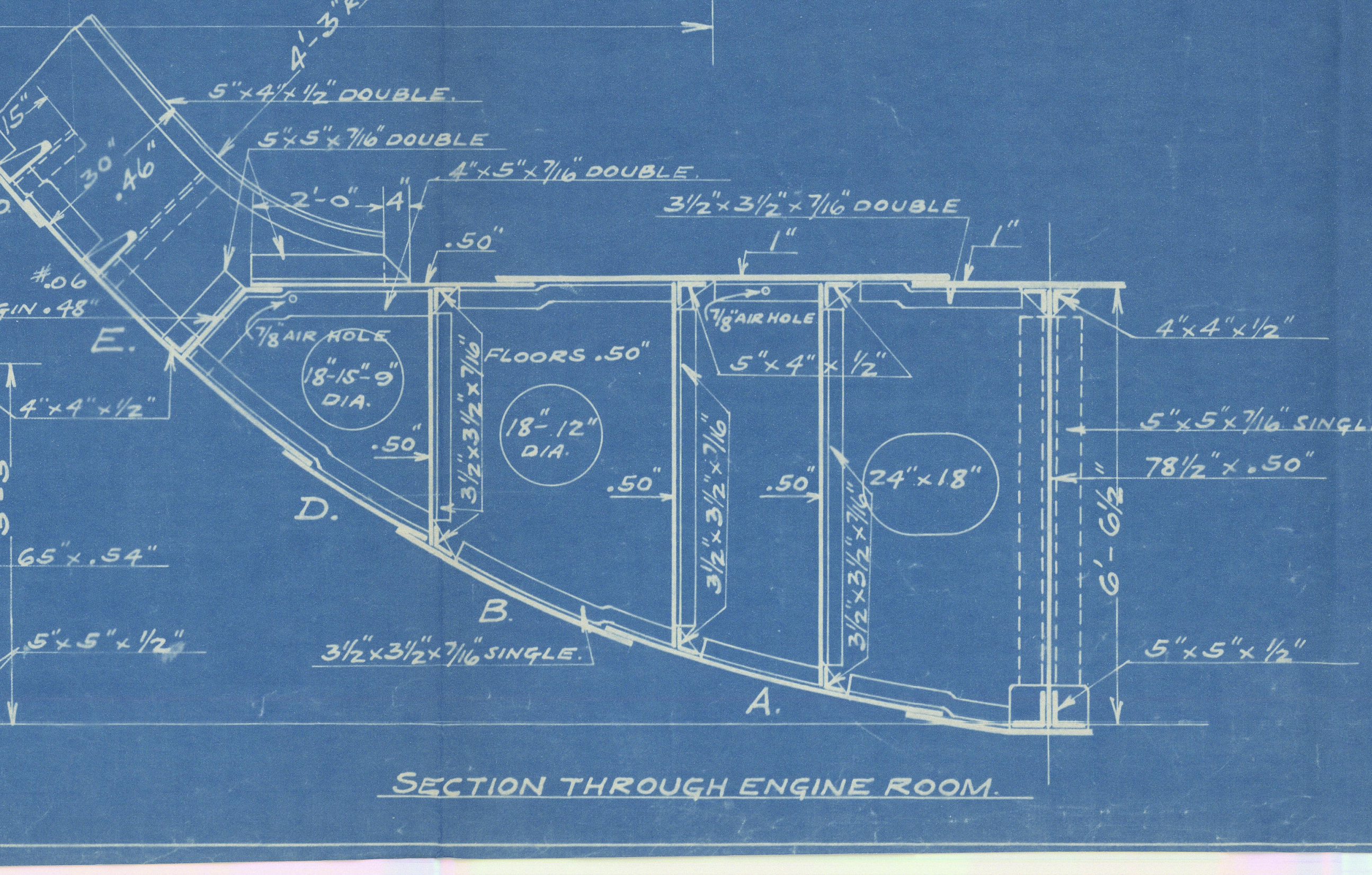
SHAPE	SIZE.
ANGLE	8"x3½"x7/16"
"	6"x6"x9/16"
"	6"x4"x9/16"
"	6"x4"x7/16"
"	6"x3½"x7/16"
"	6"x3½"x⅜"
"	5"x5"x11/16"
"	5"x5"x½"
"	5"x5"x7/16"
"	5"x4"x½"
"	5"x4"x7/16"
"	5"x3"x7/16"
"	5"x3"x⅜"
"	5"x3"x5/16
"	4"x4"x½"
"	4"x3½"x7/16
"	3½"x3½"x½"
"	3½"x3½"x7/16"
"	3½"x3½"x⅜
"	3½"x3"x7/16
"	3½"x3"x⅜"
"	3"x3"x⅜"
"	3"x3"x5/16"
BULB ANGLE.	10"x3½"x7/16"
"	8"x3½"x½"
"	8"x3½"x7/16"
"	8"x3½"x⅜"
"	7"x3½"x⅜"
"	6"x3"x⅜"
CHANNEL	12"x3½"x3½"x7/16"
"	9"x3.6"x3.6"x.50"
"	7x3½x3½"x.40"
HALF ROUND	3" SOLID.

RIVETING.

1. BUTTS OF KEEL DOUBLE Q.R.B. STRAPS 1⅛" RIVETS FOR ⅔L. TO DOUBLE T.R.B.
2. STRAPS 1" RIVETS AT ENDS.
3. BUTTS OF UPPER DK. SHEER STRAKE DOUBLE Q.R.B. STRAPS 1" RIVETS FOR
4. ½L TO DOUBLE T.R.B. STRAPS ⅞" RIVETS AT ENDS. (SEE DETAIL.)
5. BUTTS OF STRAKE BELOW SHEER Q.R.B. LAPS 1" RIVETS FOR ⅔L TO T.R.B. LAPS
6. ⅞" RIVETS AT ENDS.
7. BUTTS OF MAIN DK. SHEER STRAKE DOUBLE T.R.B. STRAPS ⅞" RIVETS IN WAY OF OIL
8. TO T.R.B. LAPS AT ENDS.
9. BUTTS OF BOTTOM AND BILGE Q.R.B. LAPS ⅞" RIVETS FOR ½L TO T.R.B. LAPS
10. AT ENDS.
11. BUTTS OF BALANCE OF SHELL T.R.B. LAPS ⅞" RIVETS (BELOW UPPER DK)
12. SEAMS OF SHELL – KEEL TO GARBOARD D.R. 1⅛" RIVETS FOR ⅔L TO 1" RIVETS AT ENDS.
13. STRAKE BELOW THE SHEER D.R. 1" TO ⅞" RIVETS – OTHER STRAKES D.R. ⅞" RIVETS.
14. BUTTS OF SHELL ABOVE UPPER DK. D.R.B. LAPS ¾" RIVETS.
15. SEAMS OF SHELL ABOVE UPPER DK. D.R. ¾" RIVETS.
16. BUTTS OF CENTRE KEELSON DOUBLE T.R.B. STRAPS ⅞" RIVETS.
17. BUTTS OF UPPER DK. STRINGER DOUBLE Q.R.B. STRAPS 1" RIVETS FOR ⅔L TO
18. SINGLE T.R.B. STRAPS ¾" RIVETS AT ENDS.
19. BUTTS OF MAIN DK. STRINGER T.R.B. LAPS ¾" RIVETS
20. BUTTS OF LOWER DK. STRINGER D.R.B. LAPS ¾" RIVETS.
21. BUTTS OF UPPER AND LOWER DK. PLATING D.R.B. LAPS ¾" RIVETS.
22. BUTTS OF MAIN DK. PLATING IN WAY OF OIL D.R.B. STRAPS TO D.R.B. LAPS AT ENDS
23. SEAMS OF MAIN AND UPPER DK. PLATING IN WAY OF OIL D.R. TO S.R. AT ENDS.
24. SEAMS OF LOWER DK. S.R. ¾" RIVETS.
25. BUTTS AND SEAMS OF TRANS. AND ℄ OIL BHDS. D.R. ⅞" RIVETS.
26. BUTTS AND SEAMS OF EXPANSION TRUNK AND BHD. D.R. ¾" RIVETS.
27. BUTTS AND SEAMS OF INNER BOTTOM IN BOILER SPACE D.R. ⅞" RIVETS.
28. BUTTS OF INNER BOTTOM IN ENGINE SPACE D.R.B. STRAPS 1⅛" RIVETS.
29. SEAMS IN ENGINE SPACE D.R. 1⅛" RIVETS.
30. BUTTS OF POOP, BRIDGE AND FO'CLE. DK. STRINGER AND POOP DK. PLATING D.R.
31. B. LAPS ¾" RIVETS
32. BUTTS OF BRIDGE DK. PLATING S.R.B. LAPS ¾" RIVETS
33. SEAMS OF POOP, BRIDGE AND FO'CLE. DK. PLATING S.R. ¾" RIVETS.
34. RIVETS BET. TRANSVERSES AND SHELL, MAIN AND UPPER DK. & BHD. ⅞" – 5 DIAS.,
35. 4½ DIAS. TO SHELL BELOW THE MAIN DECK.
36. RIVETS BET. CLIPS AND TRANSVERSES BELOW MAIN DECK ⅞" – 4½ DIAS.
37. " " " " " ABOVE " " ¾" – 5 "
38. RIVETS IN SHELL BUTTS 3½ DIAS. CENTERS – IN SEAMS 3½ DIAS. IN WAY OF OIL
39. TO 4 DIAS. AT ENDS. 4 DIAS. IN QUAD. RIV. BUTT LAPS.
40. RIVETS IN OIL BHDS. SEAMS AND BUTTS ⅞" DIA. 3½ DIAS. IN BOUNDING ANGLES
41. ⅞" DIA. 5 DIAS., AS PER RULES.
42. RIVET SPACING IN SIDE LONGLS. 1-2-3 AND 4 TO BE ⅞" 6 DIAS. AND IN
43. LONGLS. 5-6 – 5 DIAS. FOR 10 SPACES EACH SIDE OF TRANS. OR BHD. OTHERS 6 DIAS.
44. LONGLS. 7-20 – 4 DIAS. FOR 10 SPACES EACH SIDE OF TRANS. OR BHD. OTHERS 6 DIAS.
45. RIVET SPACING LONGLS. ON UPPER-MAIN-LOWER-BRIDGE-POOP AND FO'CLE. DKS.
46. BRIDGE-POOP AND FO'CLE. DK. SIDES – EX. TRUNK AND BHD. AND INNER BOTTOM
47. 5-6 DIAS. CENTERS


10"x3½"x7/16" B.A.
30"x.46"
4'-3" RAD.
5"x4"x½" DOUBLE
10"x3½"x7/16" B.A.
INTERMEDIATE BRACKETS .46" 3½" FLANGE.
TANK TOP .56" SLOPE ¼" PER FOOT OUTBOARD.
LONGLS. 7"x3½"x⅜" CLIPS 6"x3½"x7/16"
3½"x3½"x7/16 SINGLE
#9
F.
5x5x7/16 DOUBLE FOR 4 SPACES
#10.
#.06
7"x3½"x⅜" B.A.
#11.
5"x5"x7/16" SINGLE
E.
MARGIN PLATE .58"
4"x4"x½"
4"x5"x7/16" DOUBLE
BOTTOM LONGLS. 7"x3½"x⅜"
CLIPS 6"x3½"x7/16"
INTL. GIRDER .50"
24"x15"
FLOORS .56"
30"x18"
5'-5"
65"x.54"
5"x5"x½"
4"x4"x½"
MARGIN .48"
#14. #15. D. #16. #17 B. #18 #19 A. #20
3½"x3½"x7/16" SINGLE

SECTION THROUGH BOILER ROOM.


4'-3" RAD.
5"x4"x½" DOUBLE.
5"x5"x7/16" DOUBLE
4"x5"x7/16" DOUBLE.
5"x5"x7/16" DOUBLE FOR 4 SPACES
LONGLS. 10"x3½"x7/16" B.A.
CLIPS 6"x3½"x7/16"
F. #10
#.06
E.
3½"x3½"x7/16" DOUBLE
⅞" AIR HOLE
18"-15"-9" DIA.
FLOORS .50"
18"-12" DIA.
5"x4"x½"
24"x18"
4"x4"x½"
5"x5"x7/16" SINGLE
78½"x.50"
6'-6½"
5"x5"x½"
D.
B.
A.
3½"x3½"x7/16" SINGLE.

SECTION THROUGH ENGINE ROOM.

STEEL TANK STEAMER

FOR THE

GULF REFINING CO. PITTSBURGH, PA.

LENGTH BETWEEN P.P'S.	391'-7"
LENGTH OVER ALL	406'-6½"
BEAM MOLDED	51'-0"
DEPTH MOLDED AMIDSHIP	30'-2"

LLOYDS NUMERALS

BREADTH	51.0'
DEPTH	30.167'
1ST. NUMERAL	81.167
LENGTH BETWEEN P.P'S.	392.0'
2ND. NUMERAL	31817.
DEPTH TO LENGTH	12.994
DEPTH FLOOR TO TANK DECK	20.25

(LONGITUDINAL FRAMING.)

EQUIPMENT NUMERAL

POOP, BRIDGE AND FO'CLE.	977.
HOUSES ON POOP AND BRIDGE	353
LONGITUDINAL NUMBER	31817
EQUIPMENT NUMBER	33147 Y.

TO CLASS ✠ 100 A.1.

LLOYD'S REGISTER

SPECIAL SURVEY

EQUIPMENT

2-STOCKLESS BOWER ANCHORS 6720 LBS. EACH.
1 " " " 5656 "
1- STOCK STREAM ANCHOR 1820 " } EX. OF STOCK.
1 " KEDGE " 784 " }
270 FATHOMS 2 3/16" DIA. STUD LINK CHAIN
350 " 2" DIA. GALV. STEEL WIRE HAWSER
4-50 " 1⅛" " " " " MOORING LINES
240 " 7" CIR. MANILA WARPS.

22 G.R. CO
12-MR-14
23 MAILING
14 AP 14
24 51 1
24. ap 14.
25-21 LLOYDS
15-6-14

1 LIB 1
2 5 1
3 M-10 1
4 S-10 1
5-6 L-51 2
7-10 LLOYDS
11 S.B. 1-1
13 a-14
11 LIB-1
12 5 1
13 M-10 1
14 S-10 1
15-16 L-51 2
17-20 LLOYDS
21 INSP. 1
10-F-14

FINAL PLAN.

391'-7" x 51'-0 x 30'-2"

MIDSHIP SECTION

S.S. FOR THE GULF REFINING CO.

SCALE ½"=1 FT. MADE BY L.B.B. DATE 12 JAN 1914

NEW YORK SHIPBUILDING COMPANY

CAMDEN NEW JERSEY U.S.A.

DR. 156-201-A.

E. H. Rigg NAVAL ARCHITECT.

W301-0136

Midship Section.

New York S.B.C.

S.S. No. 156/7.

S/S No. 157 "Gulfstream". H. M. Fredrichsen esq

Pha Rpt No. 2167.

LLOYDS REGISTER OF SHIPPING
RECEIVED
14 DEC 1914
LONDON.

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Lloyd's Register Foundation

W301-0137

NEW YORK SHIPBUILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM
Print No. 17
Made FEB 10 1914
For Dep't Lloyds

W301-0137

W301-0137

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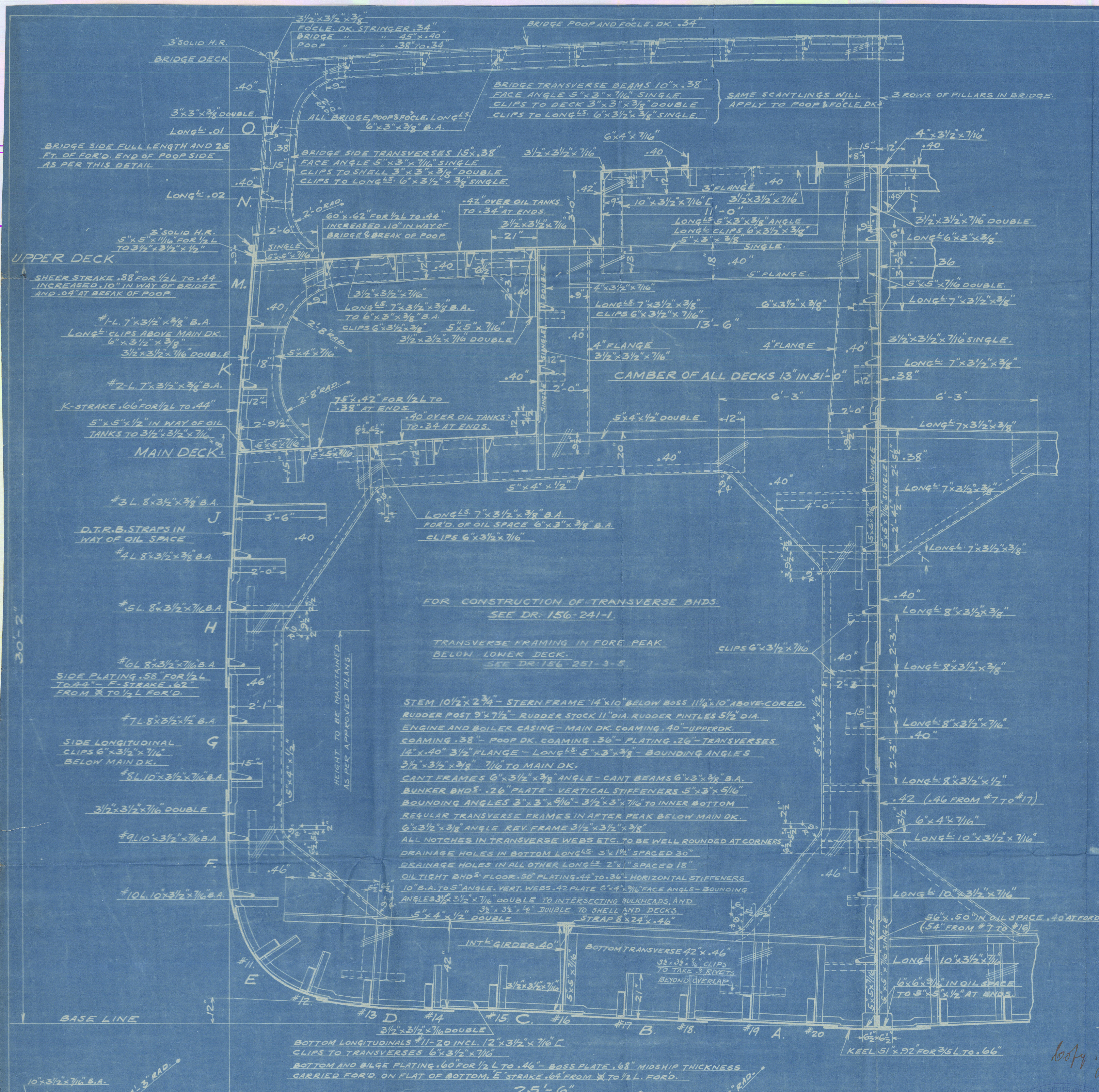
Foundation

DATE.	ALTERATIONS.
9 Feb. '14	LLOYD'S AMENDMENTS INCORPORATED. FOR DETAILS SEE RECORD PRINT ON FILE.
10 Feb. '14	RIVETING NOTES, LINES #23, #34, #35, #36 & #37 MODIFIED.

LIST OF SCANTLINGS USED.

SHAPE	SIZE.
ANGLE	8"×3½"×7/16"
"	6"×6"×9/16"
"	6"×4"×9/16"
"	6"×4"×7/16"
"	6"×3½"×7/16"
"	6"×3½"×3/8"
"	5"×5"×11/16"
"	5"×5"×½"
"	5"×5"×7/16"
"	5"×4"×½"
"	5"×4"×7/16"
"	5"×3"×7/16"
"	5"×3"×3/8"
"	5"×3"×5/16
"	4"×4"×½"
"	4"×3½"×7/16
"	3½"×3½"×½"
"	3½"×3½"×7/16"
"	3½"×3½"×3/8
"	3½"×3"×7/16
"	3½"×3"×3/8"
"	3"×3"×3/8"
"	3"×3"×5/16"
BULB ANGLE.	10"×3½"×7/16"
"	8"×3½"×½"
"	8"×3½"×7/16"
"	8"×3½"×3/8"
"	7"×3½"×3/8"
"	6"×3"×3/8"
CHANNEL	12"×3½"×3½"×7/16"
"	9"×3.6"×3.6"×.50"
"	7×3½×3½"×.40"
HALF ROUND	3" SOLID.

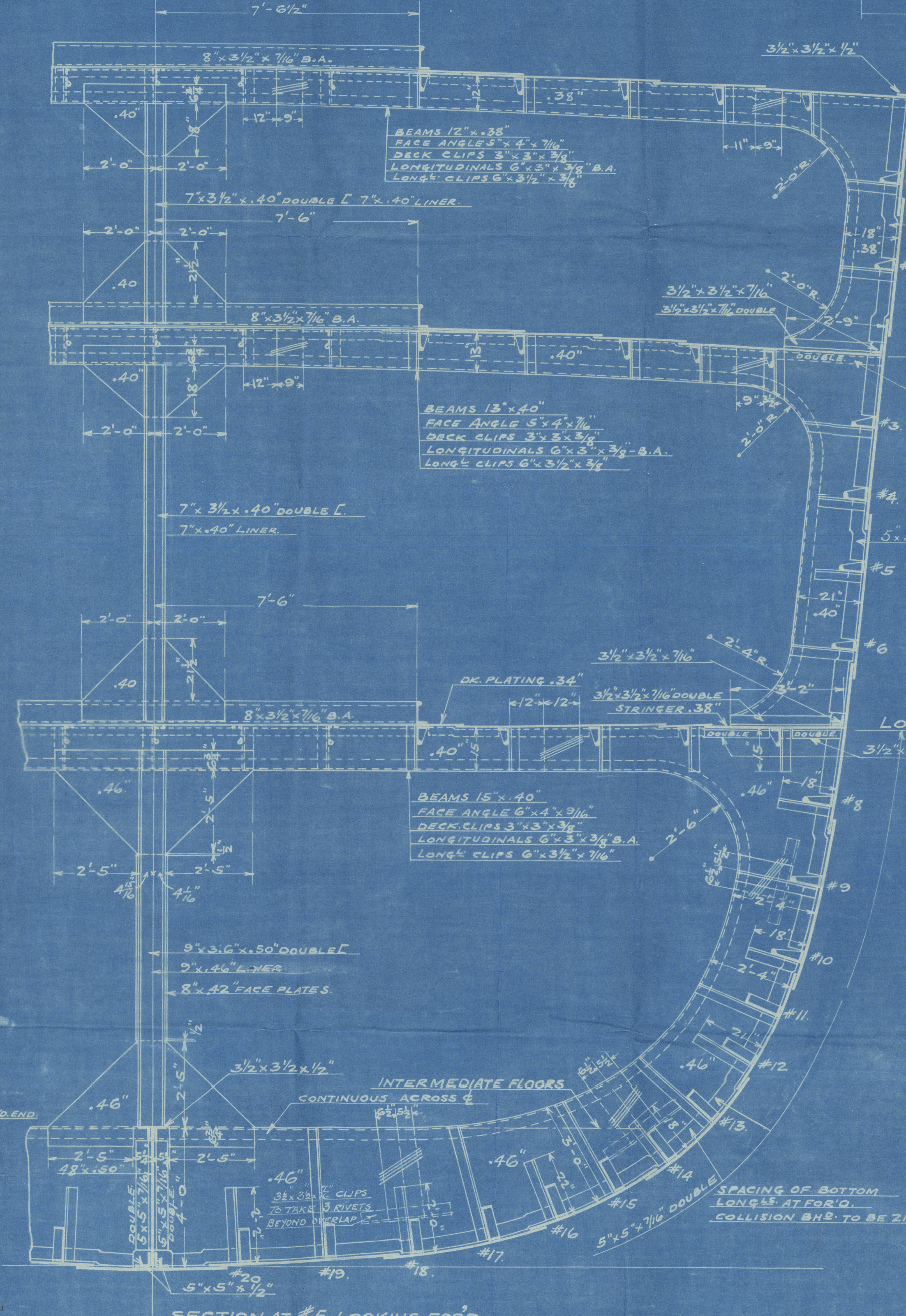

3½"×3½"×3/8"
FO'C'LE. DK. STRINGER .34"
BRIDGE " " 45"×.40"
POOP " " .38" TO .34"
BRIDGE POOP AND FO'C'LE. DK. .34"
3" SOLID H.R.
BRIDGE DECK
.40"
3"×3"×3/8" DOUBLE.
LONG'L .01
O.
ALL BRIDGE, POOP & FO'C'LE. LONG'LS. 6"×3"×3/8" B.A.
2'-0" RAD.
BRIDGE TRANSVERSE BEAMS 10"×.38"
FACE ANGLE 5"×3"×7/16" SINGLE.
CLIPS TO DECK 3"×3"×3/8" DOUBLE
CLIPS TO LONG'LS. 6"×3½"×3/8" SINGLE.
SAME SCANTLINGS WILL APPLY TO POOP & FO'C'LE. DKS.
3 ROWS OF PILLARS IN BRIDGE.
BRIDGE SIDE FULL LENGTH AND 25 FT. OF FOR'D. END OF POOP SIDE AS PER THIS DETAIL
BRIDGE SIDE TRANSVERSES 15"×.38"
FACE ANGLE 5"×3"×7/16" SINGLE
CLIPS TO SHELL 3"×3"×3/8" DOUBLE
CLIPS TO LONG'LS. 6"×3½"×3/8" SINGLE.
LONG'L .02
N.
.42" OVER OIL TANKS TO .34" AT ENDS.
60"×.62" FOR ½L TO .44" INCREASED .10" IN WAY OF BRIDGE & BREAK OF POOP.
3" SOLID H.R.
5"×5"×11/16" FOR ½L TO 3½"×3½"×½"
UPPER DECK.
SHEER STRAKE .88" FOR ½L TO .44 INCREASED .10" IN WAY OF BRIDGE AND .04" AT BREAK OF POOP.
M.
#1-L. 7"×3½"×3/8" B.A.
LONG'L CLIPS ABOVE MAIN DK. 6"×3½"×3/8"
3½"×3½"×7/16" DOUBLE
K.
#2-L. 7"×3½"×3/8" B.A.
K-STRAKE .66" FOR ½L TO .44"
5"×5"×½" IN WAY OF OIL TANKS TO 3½"×3½"×7/16"
MAIN DECK
LONG'LS. 7"×3½"×3/8" B.A. TO 6"×3"×3/8" B.A.
CLIPS 6"×3½"×3/8"
5"×5"×7/16"
3½"×3½"×7/16" DOUBLE
2'-8" RAD.
75"×.42" FOR ½L TO .38" AT ENDS.
.40" OVER OIL TANKS TO .34 AT ENDS.
CAMBER OF ALL DECKS 13" IN 51'-0"
6'-3"
5"×4"×½" DOUBLE
#3 L. 8×3½"×3/8" B.A.
J.
D.T.R.B. STRAPS IN WAY OF OIL SPACE
#4 L. 8"×3½"×3/8" B.A.
LONG'LS. 7"×3½"×3/8" B.A.
FOR'D. OF OIL SPACE 6"×3"×3/8" B.A.
CLIPS 6"×3½"×7/16"
#5 L. 8"×3½"×3/8" B.A.
H
#6 L. 8"×3½"×3/8" B.A.
SIDE PLATING .58" FOR ½L TO .46" F-STRAKE .62" FROM ⊗ TO ½L FOR'D.
#7 L. 8"×3½"×3/8" B.A.
G
SIDE LONGITUDINAL CLIPS 6"×3½"×7/16" BELOW MAIN DK.
#8 L. 10"×3½"×7/16" B.A.
3½"×3½"×7/16" DOUBLE
#9 L. 10"×3½"×7/16" B.A.
F.
#10 L. 10"×3½"×7/16" B.A.
HEIGHT TO BE MAINTAINED AS PER APPROVED PLAN.
CLIPS 6"×3½"×7/16"
LONG'L 8"×3½"×3/8"
LONG'L 10"×3½"×7/16"
.42 (.46 FROM #7 TO #17)
5"×4"×½" DOUBLE
STRAP 8"×24"×.46"
INT'L GIRDER .40"
BOTTOM TRANSVERSE 42"×.46"
3½"×3½"×7/16" CLIPS TO TAKE 3 RIVETS BEYOND OVERLAP
56"×.50" IN OIL SPACE .40" AT FOR'D. END (.54" FROM #7 TO #17)
6"×6"×9/16" IN OIL SPACE TO 5"×5"×½" AT ENDS.
#11. E. #12. #13 D. #14 #15 C. #16 #17 B. #18. #19 A. #20
BASE LINE
12"
30'-2"
3½"×3½"×7/16" DOUBLE
KEEL 51"×.92" FOR 3/5 L TO .66"
25'-6"

FOR CONSTRUCTION OF TRANSVERSE BHDS: SEE DR: 156-241-1.

TRANSVERSE FRAMING IN FORE PEAK BELOW LOWER DECK. SEE DR: 156-251-3-5.

STEM 10½"×2¾" – STERN FRAME 14"×10" BELOW BOSS 11¼"×10" ABOVE-CORED.
RUDDER POST 9"×7½" – RUDDER STOCK 11" DIA. RUDDER PINTLES 5½" DIA.
ENGINE AND BOILER CASING – MAIN DK. COAMING .40" – UPPER DK.
COAMING .38" – POOP DK. COAMING .36" – PLATING .26" – TRANSVERSES
14"×.40" 3½" FLANGE – LONG'LS. 5"×3"×3/8" – BOUNDING ANGLES
3½"×3½"×3/8" 7/16" TO MAIN DK.
CANT FRAMES 6"×3½"×3/8" ANGLE – CANT BEAMS 6"×3"×3/8" B.A.
BUNKER BHDS. .26" PLATE – VERTICAL STIFFENERS 5"×3"×5/16"
BOUNDING ANGLES 3"×3"×5/16" – 3½"×3"×7/16" TO INNER BOTTOM
REGULAR TRANSVERSE FRAMES IN AFTER PEAK BELOW MAIN DK.
6"×3½"×3/8" ANGLE REV. FRAME 3½"×3½"×3/8"
ALL NOTCHES IN TRANSVERSE WEBS ETC. TO BE WELL ROUNDED AT CORNERS
DRAINAGE HOLES IN BOTTOM LONG'LS. 3"×1½" SPACED 30"
DRAINAGE HOLES IN ALL OTHER LONG'LS. 2"×1" SPACED 18"
OIL TIGHT BHDS. FLOOR .50" PLATING .44" TO .36" – HORIZONTAL STIFFENERS
10" B.A. TO 5" ANGLE. VERT. WEBS .42 PLATE 6"×4"×9/16" FACE ANGLE – BOUNDING
ANGLES 3½"×3½"×7/16" DOUBLE TO INTERSECTING BULKHEADS, AND
3½"×3½"×½" DOUBLE TO SHELL AND DECKS.

BOTTOM LONGITUDINALS #11-20 INCL. 12"×3½"×7/16" [
CLIPS TO TRANSVERSES 6"×3½"×7/16"
BOTTOM AND BILGE PLATING .60" FOR ½L TO .46" – BOSS PLATE .68" MIDSHIP THICKNESS
CARRIED FOR'D. ON FLAT OF BOTTOM. "E" STRAKE .64" FROM ⊗ TO ½L. FOR'D.

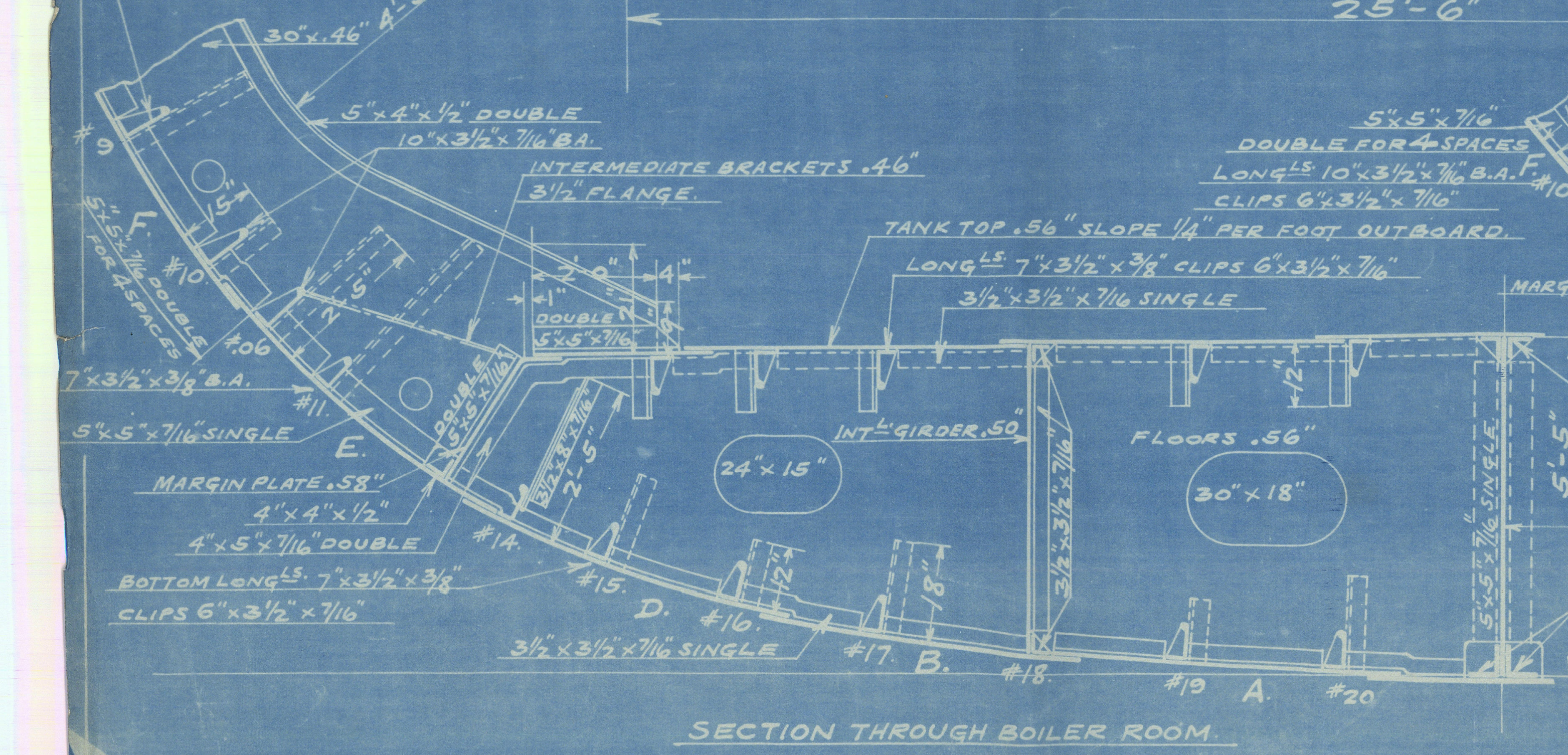

7'-6½"
3½"×3½"×½"
UPPER DECK.
8"×3½"×7/16" B.A.
.38"
BEAMS 12"×.38"
FACE ANGLES 5"×4"×7/16"
DECK CLIPS 3"×3"×3/8"
LONGITUDINALS 6"×3"×3/8" B.A.
LONG'L CLIPS 6"×3½"×3/8"
#1.
5"×5"×7/16" SINGLE.
7"×3½"×.40" DOUBLE [7"×.40" LINER
7'-6"
#2
MAIN DECK.
3½"×3"×3/8"
BEAMS 13"×.40"
FACE ANGLE 5"×4"×½"
DECK CLIPS 3"×3"×3/8"
LONGITUDINALS 6"×3"×3/8" B.A.
LONG'L CLIPS 6"×3½"×7/16"
#3.
#4.
7"×3½"×.40" DOUBLE [
7"×.40" LINER
5"×5"×7/16" SINGLE.
#5
#6
DK. PLATING .34"
3½"×3½"×7/16" DOUBLE STRINGER .38"
LOWER DECK.
3½"×3"×3/8"
BEAMS 15"×.40"
FACE ANGLE 6"×4"×9/16"
DECK CLIPS 3"×3"×3/8"
LONGITUDINALS 6"×3"×3/8" B.A.
LONG'L CLIPS 6"×3½"×7/16"
#8
#9
#10
9"×3.6"×.50" DOUBLE [
9"×.46" LINER
8"×.42" FACE PLATES.
#11
#12
INTERMEDIATE FLOORS CONTINUOUS ACROSS ⊗
3½"×3½"×½"
#13
SPACING OF BOTTOM LONG'LS. AT FOR'D. COLLISION BHD. TO BE 21"
5"×5"×7/16" DOUBLE
#16 #17 #18. #19. #20
5"×5"×½"

SECTION AT #5 LOOKING FOR'D.

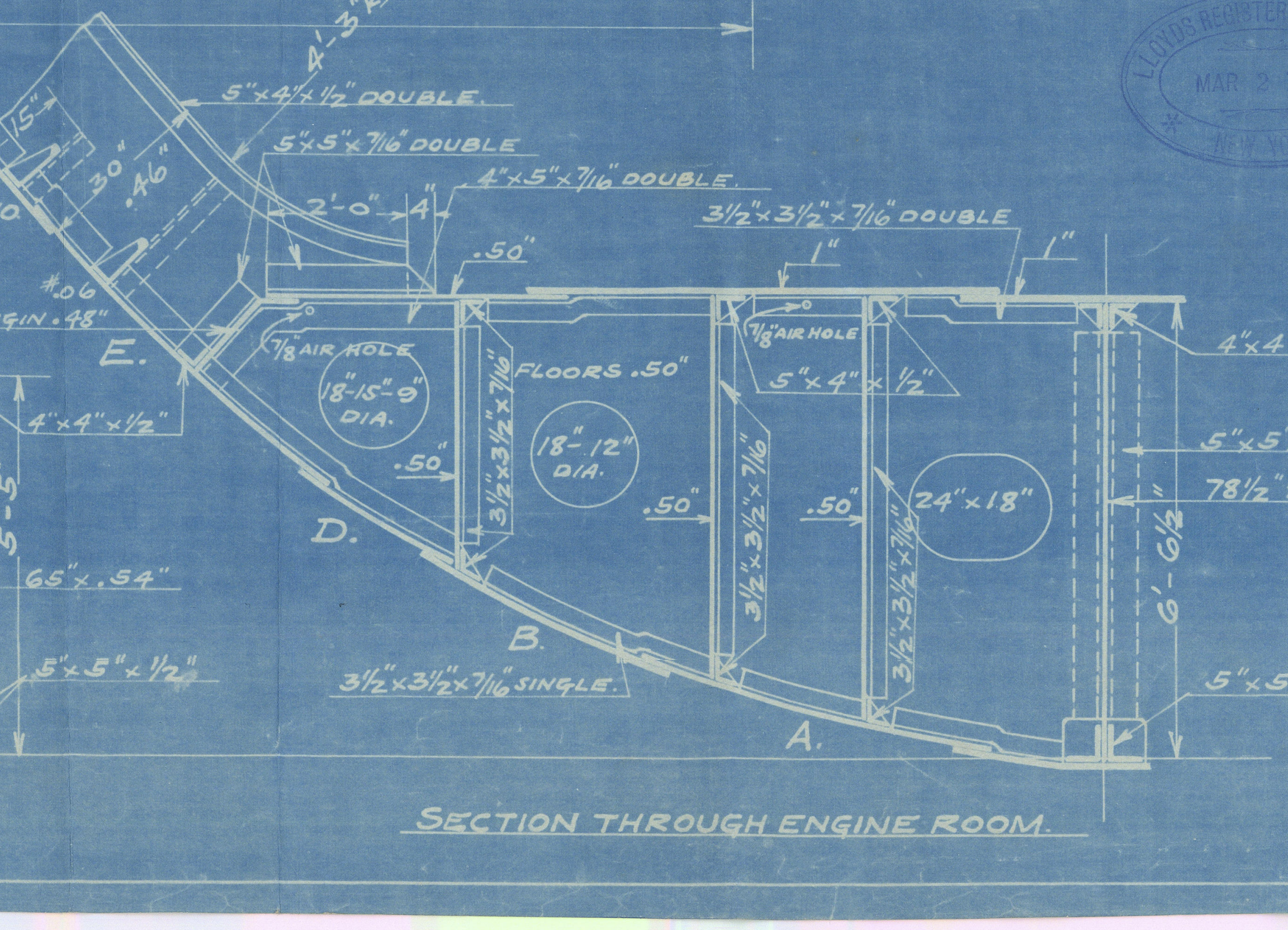
SKETCH OF FORE PEAK TO BE SUBMITTED.

RIVETING.

1. BUTTS OF KEEL DOUBLE Q.R.B. STRAPS 1⅛" RIVETS FOR ⅔L. TO DOUBLE T.R.B.
2. STRAPS 1" RIVETS AT ENDS.
3. BUTTS OF UPPER DK. SHEER STRAKE DOUBLE Q.R.B. STRAPS 1" RIVETS FOR
4. ½L TO DOUBLE T.R.B. STRAPS ⅞" RIVETS AT ENDS. (SEE DETAIL.)
5. BUTTS OF STRAKE BELOW SHEER Q.R.B. LAPS 1" RIVETS FOR ⅔L TO T.R.B. LAPS
6. ⅞" RIVETS AT ENDS.
7. BUTTS OF MAIN DK. SHEER STRAKE DOUBLE T.R.B. STRAPS ⅞" RIVETS IN WAY OF OIL
8. TO T.R.B. LAPS AT ENDS.
9. BUTTS OF BOTTOM AND BILGE Q.R.B. LAPS ⅞" RIVETS FOR ½L TO T.R.B. LAPS
10. AT ENDS.
11. BUTTS OF BALANCE OF SHELL T.R.B. LAPS ⅞" RIVETS (BELOW UPPER DK.)
12. SEAMS OF SHELL – KEEL TO GARBOARD D.R. 1⅛" RIVETS FOR ⅔L TO 1" RIVETS AT ENDS.
13. STRAKE BELOW THE SHEER D.R. 1" TO ⅞" RIVETS – OTHER STRAKES D.R. ⅞" RIVETS.
14. BUTTS OF SHELL ABOVE UPPER DK. D.R.B. LAPS ¾" RIVETS.
15. SEAMS OF SHELL ABOVE UPPER DK. D.R. ¾" RIVETS.
16. BUTTS OF CENTRE KEELSON DOUBLE T.R.B. STRAPS ⅞" RIVETS.
17. BUTTS OF UPPER DK. STRINGER DOUBLE Q.R.B. STRAPS 1" RIVETS FOR ⅔L TO
18. SINGLE T.R.B. STRAPS ¾" RIVETS AT ENDS.
19. BUTTS OF MAIN DK. STRINGER T.R.B. LAPS ¾" RIVETS
20. BUTTS OF LOWER DK. STRINGER D.R.B. LAPS ¾" RIVETS.
21. BUTTS OF UPPER AND LOWER DK. PLATING D.R.B. LAPS ¾" RIVETS.
22. BUTTS OF MAIN DK. PLATING IN WAY OF OIL D.R.B. STRAPS TO D.R.B. LAPS AT ENDS
23. SEAMS OF MAIN AND UPPER DK. PLATING IN WAY OF OIL D.R. TO S.R. AT ENDS.
24. SEAMS OF LOWER DK. S.R. ¾" RIVETS.
25. BUTTS AND SEAMS OF TRANS. AND ⊗ OIL BHDS. D.R. ⅞" RIVETS.
26. BUTTS AND SEAMS OF EXPANSION TRUNK AND BHD. D.R. ¾" RIVETS.
27. BUTTS AND SEAMS OF INNER BOTTOM IN BOILER SPACE D.R. ⅞" RIVETS.
28. BUTTS OF INNER BOTTOM IN ENGINE SPACE D.R.B. STRAPS 1⅛" RIVETS.
29. SEAMS IN ENGINE SPACE D.R. 1⅛" RIVETS.
30. BUTTS OF POOP, BRIDGE AND FO'C'LE. DK. STRINGER AND POOP DK. PLATING D.R.
31. B. LAPS ¾" RIVETS
32. BUTTS OF BRIDGE DK. PLATING S.R.B. LAPS ¾" RIVETS
33. SEAMS OF POOP, BRIDGE AND FO'C'LE. DK. PLATING S.R. ¾" RIVETS.
34. RIVETS BET. TRANSVERSES AND SHELL, MAIN AND UPPER DK. ⊗ BHD. ⅞" – 5 DIAS.,
35. 4½ DIAS. TO SHELL BELOW THE MAIN DECK.
36. RIVETS BET. CLIPS AND TRANSVERSES BELOW MAIN DECK ⅞" – 4½ DIAS.
37. " " " " " ABOVE " " ¾" – 5 "
38. RIVETS IN SHELL BUTTS 3½ DIAS. CENTERS – IN SEAMS 3½ DIAS. IN WAY OF OIL
39. TO 4 DIAS. AT ENDS. 4 DIAS. IN QUAD. RIV. BUTT LAPS.
40. RIVETS IN OIL BHDS. SEAMS AND BUTTS ⅞" DIA. 3½ DIAS. IN BOUNDING ANGLES
41. ⅞" DIA. 5 DIAS., AS PER RULES.
42. RIVET SPACING IN SIDE LONG'LS. 1-2-3 AND 4 TO BE ⅞" 6 DIAS. AND IN
43. LONG'LS. 5-6 – 5 DIAS. FOR 10 SPACES EACH SIDE OF TRANS. OR BHD. OTHERS 6 DIAS.
44. LONG'LS. 7-20 – 4 DIAS. FOR 10 SPACES EACH SIDE OF TRANS. OR BHD. OTHERS 6 DIAS.
45. RIVET SPACING LONG'LS. ON UPPER – MAIN – LOWER – BRIDGE – POOP AND FO'C'LE. DKS.
46. BRIDGE – POOP AND FO'C'LE. DK. SIDES – EX. TRUNK AND BHD. AND INNER BOTTOM
47. 5-6 DIAS. CENTERS


10"×3½"×7/16" B.A.
30"×.46"
4'-3" RAD.
5"×5"×½" DOUBLE
INTERMEDIATE BRACKETS .46"
3½" FLANGE
TANK TOP .56" SLOPE ¼" PER FOOT OUTBOARD.
LONG'LS. 7"×3½"×3/8" CLIPS 6"×3½"×3/8"
3½"×3½"×7/16" SINGLE
MARGIN .46"
5"×5"×7/16" SINGLE
E.
MARGIN PLATE .58"
4"×4"×½"
4"×5"×7/16" DOUBLE
BOTTOM LONG'LS. 7"×3½"×3/8"
CLIPS 6"×3½"×7/16"
INT'L GIRDER .50"
24"×15"
FLOORS .66"
30"×18"
5'-5"
66"×.54"
D. #16 #17 B. #18 #19 A. #20
3½"×3½"×7/16" SINGLE

SECTION THROUGH BOILER ROOM.


4'-3" RAD.
5"×5"×7/16"
DOUBLE FOR 4 SPACES
LONG'LS. 10"×3½"×7/16" B.A. F'D.
CLIPS 6"×3½"×7/16"
5"×4"×½" DOUBLE.
5"×5"×7/16" DOUBLE
4"×5"×7/16" DOUBLE
5"×5"×7/16" DOUBLE
E.
AIR HOLE
15"–12" DIA.
FLOORS .50"
24"×18"
5"×4"×½"
4"×4"×½"
5"×5"×7/16" SINGLE
78½"×.50"
6'-6½"
D.
B
3½"×3½"×7/16" SINGLE.
A.
5"×5"×½"

SECTION THROUGH ENGINE ROOM.

Appd.
Approved

J. Montgomerie

STEEL TANK STEAMER

FOR THE

GULF REFINING CO. PITTSBURGH, PA.

LENGTH BETWEEN P.P'S.	391'-7"
LENGTH OVER ALL	406'-6½"
BEAM MOLDED	51'-0"
DEPTH MOLDED AMIDSHIP	30'-2"

LLOYDS NUMERALS

BREADTH	51.0'
DEPTH	30.167'
1ST. NUMERAL	81.167
LENGTH BETWEEN P.P'S.	392.0'
2ND. NUMERAL	31817.
DEPTH TO LENGTH	12.994
DEPTH FLOOR TO TANK DECK	20.25

(LONGITUDINAL FRAMING.)

EQUIPMENT NUMERAL

POOP, BRIDGE AND FO'C'LE.	977.
HOUSES ON POOP AND BRIDGE	353
LONGITUDINAL NUMBER	31817
EQUIPMENT NUMBER	33147 Y.

TO CLASS ✠ 100 A.1.

LLOYD'S REGISTER

SPECIAL SURVEY

EQUIPMENT

2 – STOCKLESS BOWER ANCHORS 6720 LBS. EACH.
1 " " " 5656 "
1 – STOCK STREAM ANCHOR 1820 " } EX. OF
1 " KEDGE " 784 " } STOCK.
270 FATHOMS 2 3/16" DIA. STUD LINK CHAIN
350 " 2" DIA. GALV. STEEL WIRE HAWSER
4-50 " 1⅛" " " " " MOORING LINES
240 " 7" CIR. MANILA WARPS.

SURVEYOR TO LLOYD'S REGISTER
PHILADELPHIA
FEB 19 1914
PENNA.

FINAL PLAN.

391'-7"×51'-0×30'-2"

1 LIB. 1
2 5 1
3 M-10 1
4 S-10 1
5-6 L-51 2
7-10 LLOYDS
11 S-B-1-1
13 Ja-14
11 LIB-1
12 5 1
13 M-10 1
14 S-10 1
15-16 L-51 2
17-20 LLOYDS
21 INSP. 1
10-F-14

MIDSHIP SECTION

S.S. FOR THE GULF REFINING CO.

SCALE ½"=1 FT. MADE BY L.A.B. DATE 12 JAN 1914

NEW YORK SHIPBUILDING COMPANY
CAMDEN NEW JERSEY U.S.A.

DR. 156-201-A.

E. H. Rigg NAVAL ARCHITECT.

W301-0137

Main B 157

PHILADELPHIA

New York Shipbuilding Company

Three main boilers

Working pressure 190 lbs.

64
LLOYD'S TEST
285 lbs.
5-25-14. R.H.

H.M. Fredrichsen

S.S. "GULFSTREAM" esc

Phil. report No. 2167

Duplicate of S.S. "Gulflight"

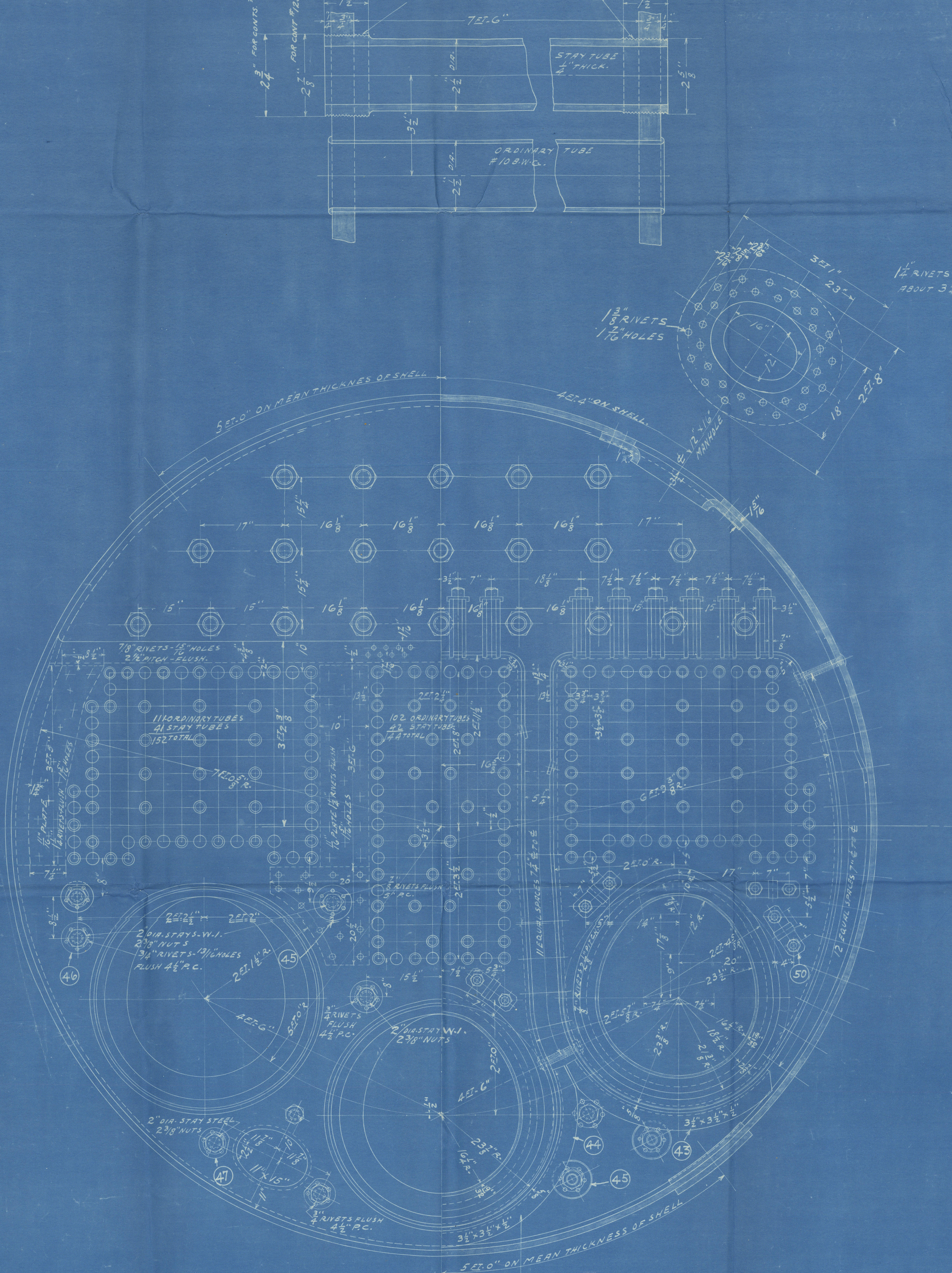
LLOYDS REGISTER OF SHIPPING
RECEIVED
-9 NOV. 1914
LONDON.

W301-0139

NEW YORK SHIPBUILDING CO.,
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM
Print No. 45
Made JAN 7 1914
For Dep't MAILING

W301-0139

W301-0139


12-CONTINOUS THREADS PER INCH
7 FT. 6"
STAY TUBES 1/4" THICK.
ORDINARY TUBES #10 B.W.G.
1 3/4" RIVETS 1 7/16" HOLES
1 1/4" RIVETS - 1 5/16" HOLES ABOUT 3 3/8" PITCH.
MANHOLE
5 FT. 0" ON MEAN THICKNESS OF SHELL
4 FT. 4" ON SHELL
111 ORDINARY TUBES 41 STAY TUBES 152 TOTAL
102 ORDINARY TUBES 42 STAY TUBES 144 TOTAL
2" DIA. STAYS - W.I. 2 3/8" NUTS
3/4" RIVETS - 13/16" HOLES FLUSH 4 1/2" P.C.
2" DIA. STAY STEEL 2 3/8" NUTS
44
45
46
47
43
50
5 FT. 0" ON MEAN THICKNESS OF SHELL

BUREAU OF COMMERCE & LABOR

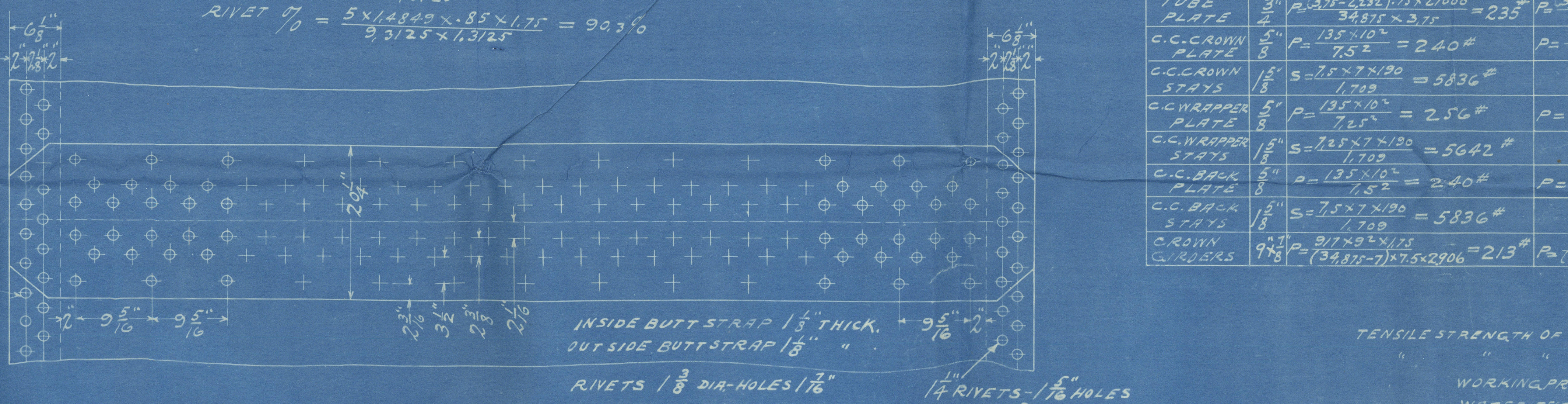
$$\text{PLATE }\% = \frac{9.3125 - 1.4375 \times 100}{9.3125} = 84.5\,\%$$

$$\text{RIVET }\% = \frac{5 \times 1.623 \times 1.75 \times .85}{9.3125 \times 1.3125} \times 100 = 98.7\,\%$$

LLOYDS RULE

$$\text{PLATE }\% = \frac{9.3125 - 1.4375}{9.3125} \times 100 = 84.5\,\%$$

$$\text{RIVET }\% = \frac{5 \times 1.4849 \times .85 \times 1.75}{9.3125 \times 1.3125} = 90.3\,\%$$


INSIDE BUTT STRAP 1 3/8" THICK.
OUT SIDE BUTT STRAP 1 1/8" "
RIVETS 1 3/8" DIA. HOLES 1 7/16"
1 1/4" RIVETS - 1 5/16" HOLES ABOUT 3 3/4" PITCH.

ATERATIONS	DATE	APPROVED
32 RIVETS FOR 40 IN MANHOLE RING AS PER LLOYDS LETTER DEC 8-11 MANHOLE LOCATED IN SHELL.	16-JAN-12	P.M.Y.

CONSTRUCTED UNDER THE RULES OF BOARD OF SUPERVISING INSPECTORS, DEPT OF COMMERCE AND LABOR AND LLOYS REGISTER

FOR 190 LBS. WORKING PRESSURE

DECRIPTION	THICKNESS	U.S. RULES	LLOYDS RULES
SHELL	1 5/16"	$P=\frac{65000 \times 1.3125}{6 \times 88}+20\% = 193\#$	$P=\frac{22 \times (21-2) \times 84.5}{177.3125} = 199\#$
FURNACE	19/32"	$P=\frac{15600 \times .5937}{44} = 210\#$	$P=\frac{1259 \times (9.5-2)}{46.1875} = 204\#$
TOP HEAD PLATE	1 1/8"	$P=\frac{175 \times 18^2}{17^2} = 196\#$	$P=\frac{175 \times 18^2}{260.781} = 217\#$
TOP HEAD STAYS	2 3/4	$S=\frac{17 \times 15.25 \times 190}{5.939} = 8293\#$	
TUBE PLATE	3/4"	$P=\frac{(3.75-2.232) .75 \times 27000}{34.875 \times 3.75} = 235\#$	$P=\frac{(3.75-2.232) \times 1750 \times 12}{33.5 \times 3.75} = 253\#$
C.C. CROWN PLATE	5/8"	$P=\frac{135 \times 10^2}{7.5^2} = 240\#$	$P=\frac{135 \times 10^2}{52.62} = 256\#$
C.C. CROWN STAYS	1 5/8"	$S=\frac{7.5 \times 7 \times 190}{1.709} = 5836\#$	
C.C. WRAPPER PLATE	5/8"	$P=\frac{135 \times 10^2}{7.25^2} = 256\#$	$P=\frac{135 \times 10^2}{50.78} = 265\#$
C.C. WRAPPER STAYS	1 5/8"	$S=\frac{7.25 \times 7 \times 190}{1.709} = 5642\#$	
C.C. BACK PLATE	5/8"	$P=\frac{135 \times 10^2}{7.5^2} = 240\#$	$P=\frac{135 \times 10^2}{52.62} = 256\#$
C.C. BACK STAYS	1 5/8"	$S=\frac{7.5 \times 7 \times 190}{1.709} = 5836\#$	
CROWN GIRDERS	9"×7/8	$P=\frac{917 \times 9^2 \times 1.75}{(34.875-7) \times 7.5 \times 2.906} = 213\#$	$P=\frac{11850 \times 9^2 \times 1.75}{(33.5-7) \times 7.5 \times 33.5} = 252\#$

BOILER DATA - ONE BOILER	HEATING SURFACE
TUBES	2199.1 □'
FURNACES	149.4 □'
COMB. CHAMBER	220 □'
BACK TUBE PLATE	46 □'
TOTAL H.S.	2614.5 □'
GRATE SURFACE	57.75 □'
$\frac{H.S}{G.S.}$	45.3
CALORIMETER	11.5 □'
$\frac{G.S}{CAL.}$	5

TENSILE STRENGTH OF SHELL PLATES & GIRDERS 65000 TO 71680 LBS.
" " " FLANGE " 58240 TO 67200 "

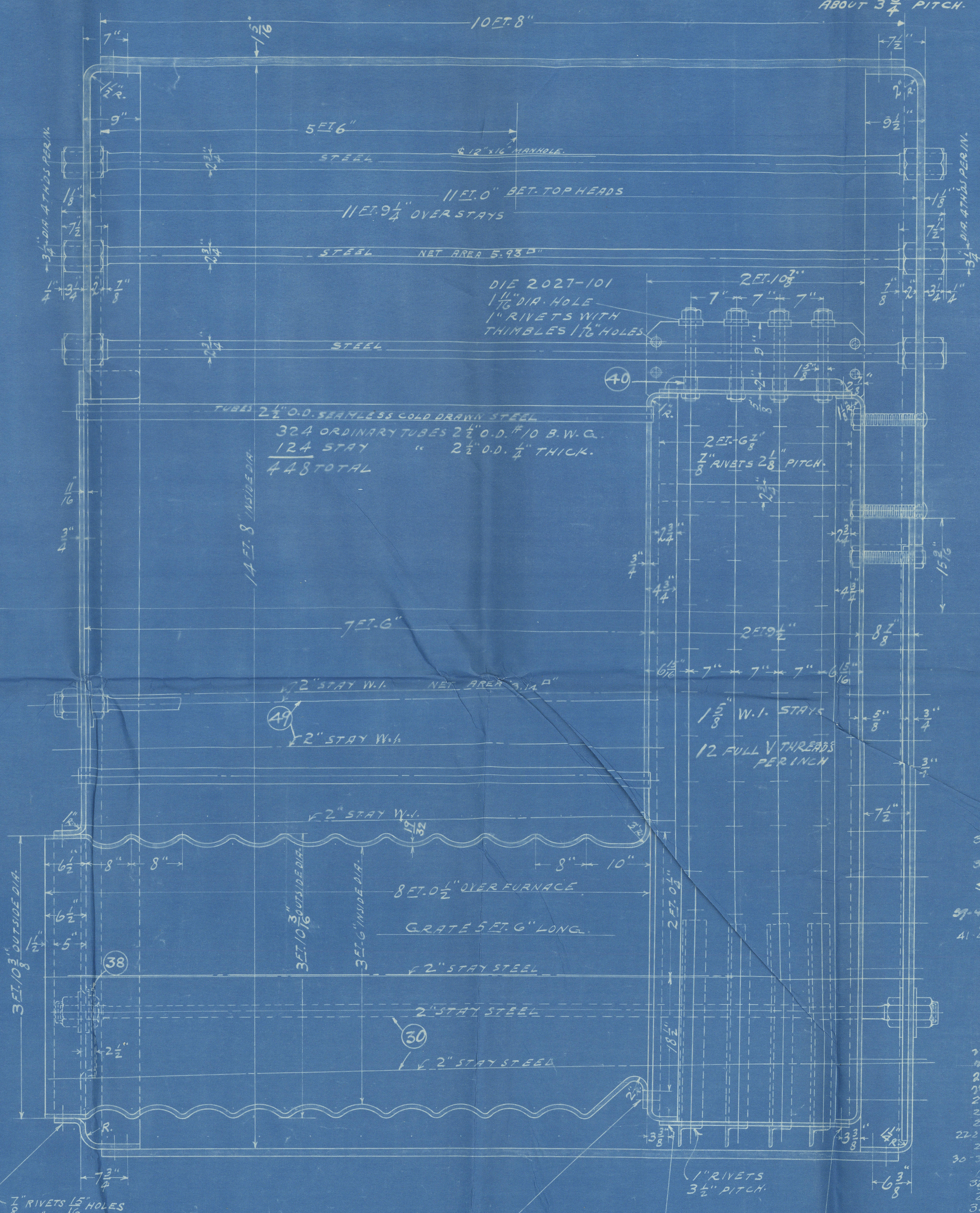
WORKING PRESSURE 190 LBS PER SQ. IN.
WATER TEST " 285 " " "

EVAPORATION 270 LBS. OF WATER PER SQ. FT. OF GRATE PER HOUR.

TWIN SAFETY VALVE COMBINED AREA OF 4 1/2" DIA.

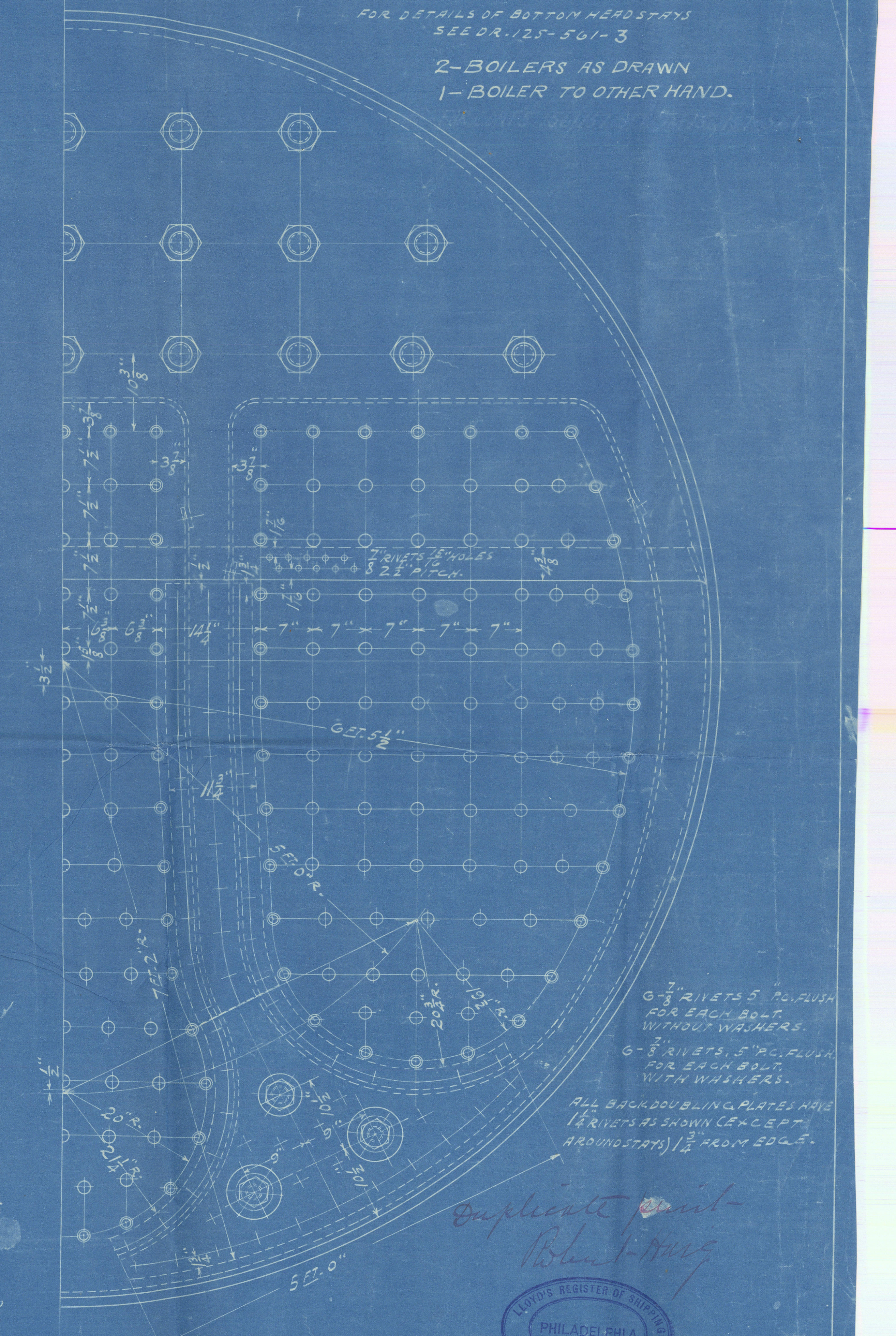
FOR DETAILS OF BOTTOM HEAD STAYS SEE DR. 125-561-3

2-BOILERS AS DRAWN
1-BOILER TO OTHER HAND.


10 FT. 8"
5 FT. 6"
11 FT. 0" BET. TOP HEADS
11 FT. 9 1/4" OVER STAYS
STEEL
DIE 2027-101 1 1/2" DIA. HOLE
1" RIVETS WITH THIMBLES 1 1/16" HOLES
40
TUBES 2 1/2" O.D. SEAMLESS COLD DRAWN STEEL
324 ORDINARY TUBES 2 1/2" O.D. #10 B.W.G.
124 STAY " 2 1/2" O.D. 1/4" THICK.
448 TOTAL
7/8" RIVETS 2 5/8" PITCH.
7 FT. 6"
2" STAY W.I.
41
1" W.I. STAYS
12 FULL V THREADS PER INCH
8 FT. 0 1/2" OVER FURNACE
GRATE 5 FT. 6" LONG
2" STAY STEEL
38
39
2" STAY STEEL
1" RIVETS 3 1/2" PITCH.

30 FOGH 1
23 AG 12
37 LIB 1
26, AG, 12
38 9 1
16 8 12
39-40 KENNEDY
16 N-12
41-46 MAILING
7-Ja-14

22 KENNEDY
27-D-11
23 P.M. YOUNG
28-D-11
24 LIB 1
25 9 1
26 27 1
22 28 29 2
29 42 1
30-31 46 2
16 Jan 12
32 Drake
25 Mar 12
33 13 1
27 Ap 12
34 MR. HOWITZ
23 My 13
35 P. YOUNG
10 Ja 12
1 S OK 1
2-N-11
2 9 OK 1
9-N-11
3-5 LLOYD 3
6-7 LOCAL I. 2
8-9 KENNEDY 2
11-N-11
10 S+K 1
14-N-11
11-13 HAIG 3
15-N-11
14 LIB 1
15 9 1
16 27 1
17-18 29 2
19 42 1
20-21 46 2
20 Dec 11



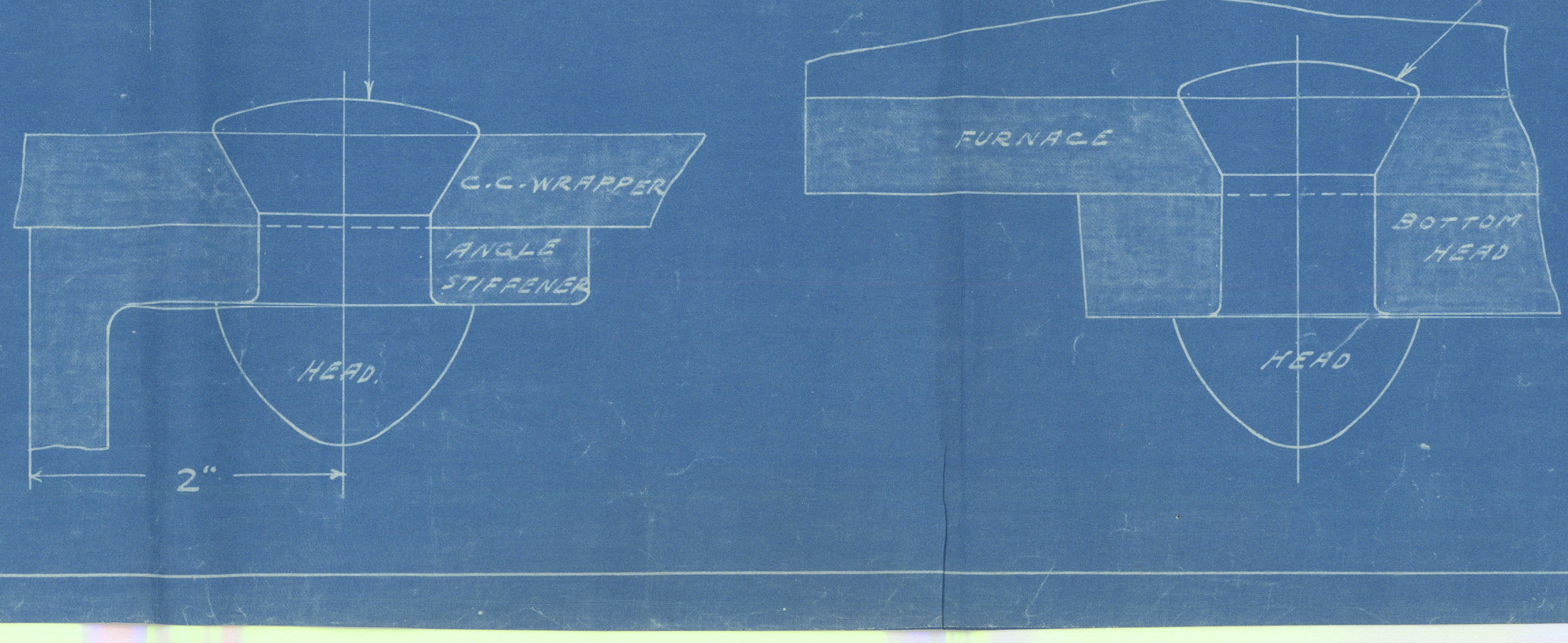
G-7/8" RIVETS 5" P.C. FLUSH
FOR EACH BOLT.
WITHOUT WASHERS.

G-7/8" RIVETS, 5" P.C. FLUSH
FOR EACH BOLT.
WITH WASHERS.

ALL BACK DOUBLING PLATES HAVE 1 1/4" RIVETS AS SHOWN (EXCEPT AROUND STATYS) 1 3/4" FROM EDGE.

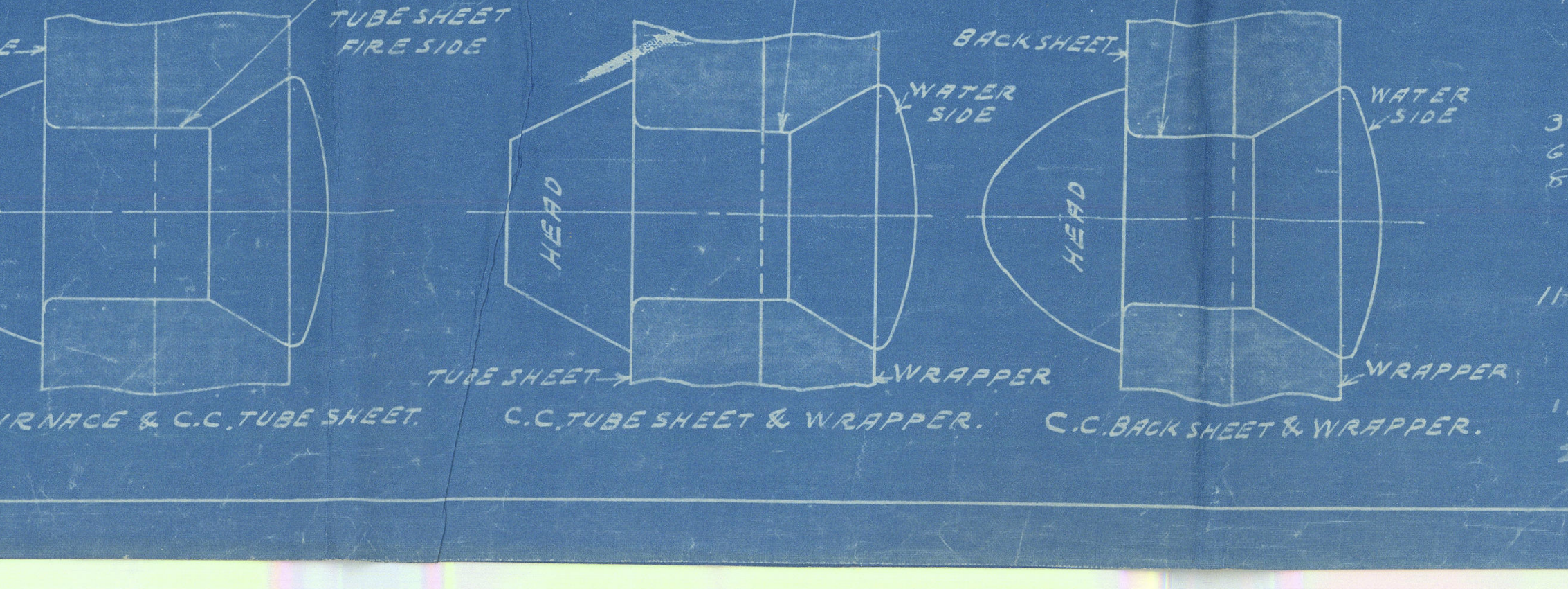
Duplicate print -
Robert Haig

ALL FRONT DOUBLING PLATES
HAVE 1 1/4" RIVETS AS SHOWN
(EXCEPT AROUND STAYS)
1 3/4" FROM EDGE C-S. AND FLUSH RIVETED.


C.C. WRAPPER
ANGLE STIFFENER
HEAD
2"
FURNACE
BOTTOM HEAD
HEAD

7/8" RIVETS 15/16" HOLES
2 1/8" PITCH.

ALL CAULKING EDGES OF BOILER PLATE TO BE MACHINE PLANED SEAMS, BUTTS, AND LAPS TO FIT CLOSELY DRAWN UP, METAL TO METAL, AND AFTER BEING RIVETED, CAULKED INSIDE AND OUTSIDE.
ALL REINFORCE PLATES TO BE CAULKED.


FURNACE
TUBE SHEET FIRE SIDE
HEAD
FURNACE
TUBE SHEET
WATER SIDE
WRAPPER
BACK SHEET
WATER SIDE
WRAPPER
FURNACE & C.C. TUBE SHEET.
C.C. TUBE SHEET & WRAPPER.
C.C. BACK SHEET & WRAPPER.

ALL SCREW STAYS W.I.
SCREW STAYS ON BACK HEAD MARKED THUS
◎ 2" DIA. NUTS 1 1/4" DEEP NET AREA 2.692 □"

SCREW STAYS ON BACK HEAD MARKED THUS
○ 1 5/8" DIA. NUTS 1" DEEP. NET AREA 1.709 □"
WRAPPER SCREW STAYS 1 5/8" DIA. NUTS 1" DEEP.
GIRDER SCREW STAYS 1 5/8" DIA. NUTS 1 5/8 & 1" DEEP.
ALL SCREW STAYS HAVE 12 FULL V THREADS PER INCH.
ALL SCREW STAYS TO HAVE 1/8" HOLE DRILLED 1/2" BEYOND INNER SURFACE OF PLATE.

LLOYD'S REGISTER OF SHIPPING
PHILADELPHIA
324 THE BOURSE.

ENGINE DEPARTMENT.

TITLE 14 FT. 8" INS. DIA. X 11 FT. 0" BET-HEADS
S. E. SCOTCH BOILER.
190 LBS. WORKING PRESS.

SCALE 1" = 1 FT. DRAWN BY 223 DATE 11-D-11
TRACED BY 223 CHECKED CHIEF DRAFTSMAN P.M.Y.

NEW YORK SHIP BUILDING COMPANY.
CAMDEN, NEW JERSEY, U.S.A.

DR. 125-561-1

APPROVED CHIEF ENGINEER

Donkey 157

PHILADELPHIA

New York Shipbuilding Company

One donkey boiler

Working pressure 120 lbs.

65

LLOYD'S TEST

180 lbs.

5-25-14 R.H.

H.M. Fredrichsen

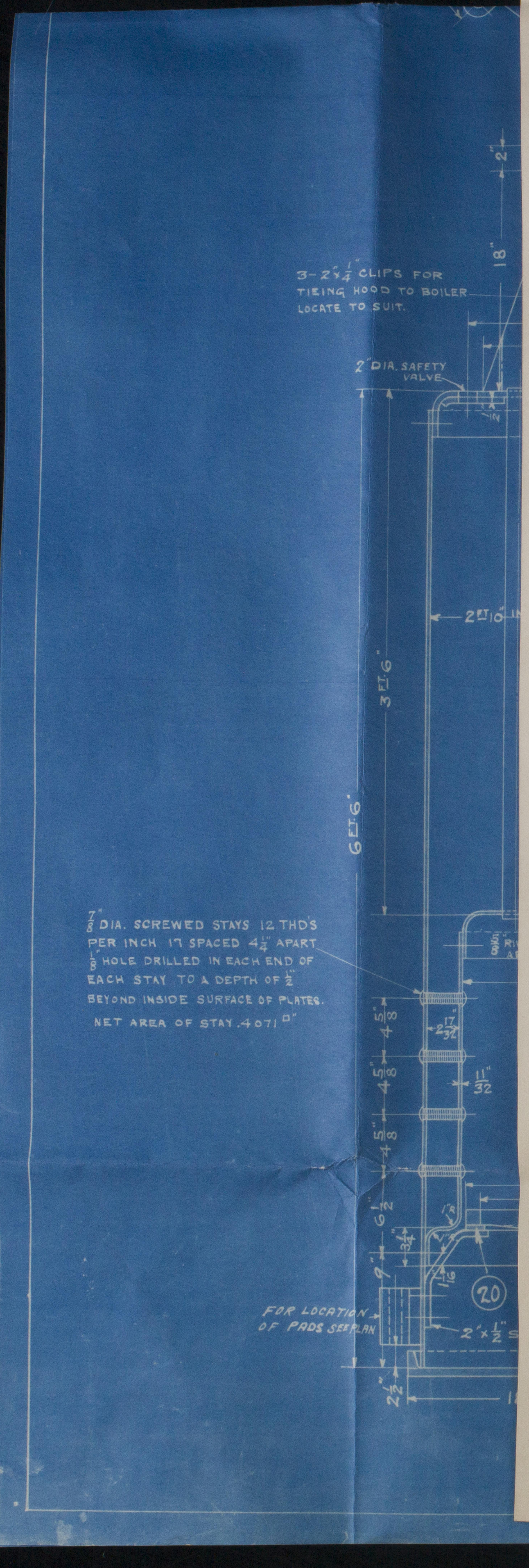
S.S. "GULSTREAM" ex

Phil. No. 2167

Duplicate of S.S. "Gulflight"

LLOYDS REGISTER OF SHIPPING
RECEIVED
-9NOV.1914
LONDON.

W301-0140


3-2"×¼" CLIPS FOR TIEING HOOD TO BOILER LOCATE TO SUIT.
2"
18"
2" DIA. SAFETY VALVE
2 FT 10 IN
3 FT 6
6 FT 6
⅞" DIA. SCREWED STAYS 12 THDS PER INCH 17 SPACED 4½" APART ⅛" HOLE DRILLED IN EACH END OF EACH STAY TO A DEPTH OF ½" BEYOND INSIDE SURFACE OF PLATES.
NET AREA OF STAY .4071 □"
4⅝"
4⅝"
4⅝"
2 17/32
11/32
6½"
3¼"
9"
20
FOR LOCATION OF PADS SEE PLAN
2"×½" S
2¼"

NEW YORK SHIPBUILDING CO.,
CAMDEN, N. J., U. S. A.
BLUE PRINT ROOM
Print No. 44
Made JAN 7 1914
For Dep't 13

W301-0140

U.S. RULES

$$\text{PLATE \%} = \frac{2.28-.687}{2.28} \times 100 = 69.8\%$$

$$\text{RIVET \%} = \frac{2 \times .371 \times .85}{2.28 \times .312} \times 100 = 88.6\%$$

LLOYDS RULES

$$\text{PLATE \%} = \frac{2.28-.687}{2.28} \times 100 = 69.8\%$$

$$\text{RIVET \%} = \frac{2 \times .306 \times 85}{2.28 \times .312} = 73.1\%$$

ALTERATIONS	DATE	APPROVED
ALT'D IN ACCORDANCE WITH LLOYD'S LETTER DATED DEC-18-1911.		
ADDITIONAL ORDER FOR PADS PC Nº 55	MAY 11/12	Pmy

CONSTRUCTED UNDER THE RULES OF THE BOARD OF SUPERVISING INSPECTORS DEP'T OF COMMERCE & LABOR & LLOYDS REGISTER.

FOR 120 LBS WORKING STEAM PRESS.

DESCRIPTION	THICKNESS	U.S. RULES	LLOYDS RULES.
SHELL PLATE	$\frac{5}{16}$"	$P = \frac{62720 \times .312}{6 \times 17} + 20\% = 230^{\#}$	$P = \frac{20.5 \times (5-2) \times 69.8}{34 \cdot 312} = 125^{\#}$
FIRE BOX	$\frac{11}{32}$"	$P = \frac{112 \times 5.5^2}{4.625^2} = 158^{\#}$	$P = \frac{90 \times 5.5^2}{19.726} = 138^{\#}$
FIRE BOX STAY	$\frac{7}{8}$" DIA	$S = \frac{120 \times 4.25 \times 4.625}{.4071} = 5794^{\#}$	

HEATING SURFACE

TUBES	107.6 ⌀
FIREBOX	19.1 ⌀
TOTAL H.S.	126.7 ⌀
GRATE SURFACE	4.3 ⌀
RATIO $\frac{H.S.}{G.S.}$	29.4
CALORIMETER	1.03 ⌀
RATIO $\frac{G.S.}{CAL}$	4.1
EVAPORATION 50 LBS. WATER PER SQ.FT. OF GRATE PER HR.	

TENSILE STRENGTH OF SHELL PLATES 62720 TO 71680 LBS

" " " FLANGE " 58240 " 67200 "

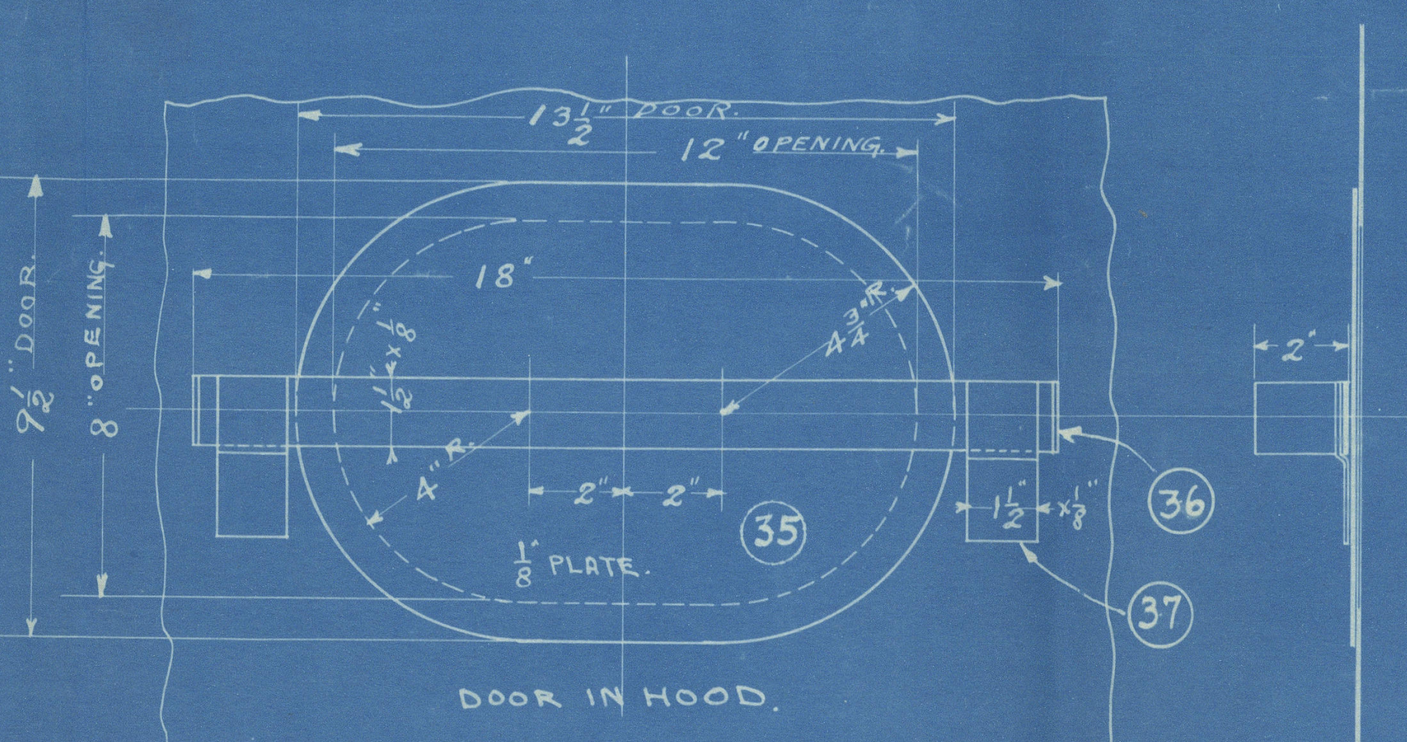
WORKING PRESS. 120 LBS PER SQ.INCH

WATER TEST " 180 " " " "

2" DIA. SAFETY VALVE SINGLE SPRING.

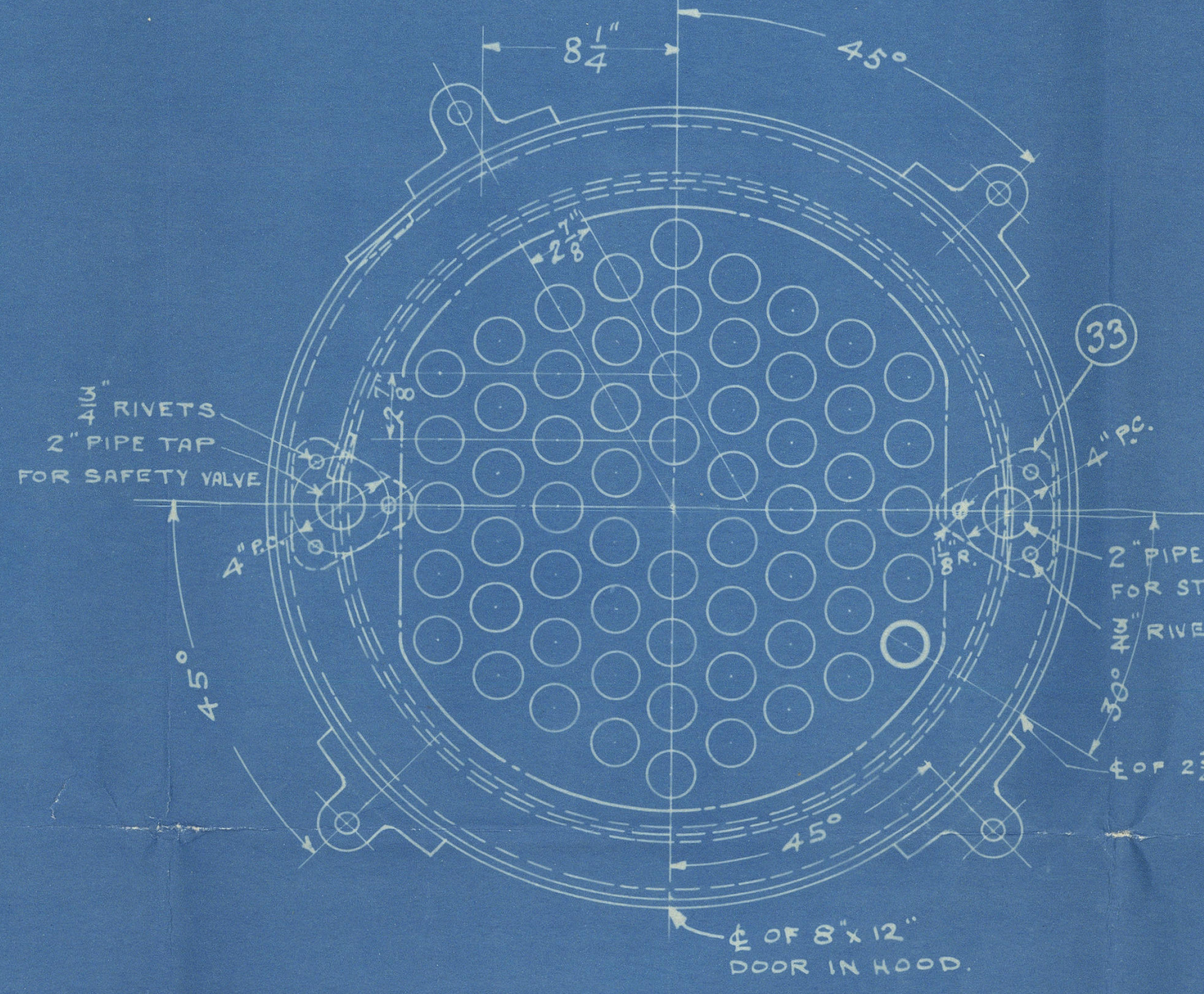
QUANTITY FOR ONE COMPLETE

Nº PCS	NAME	MAT'L	PATT Nº	WT. LBS	REMARKS	DR. Nº	PC. Nº
1	ASH PAN	C.I.	125-565-17			125-641-1	17
1	MIDDLE GRATE BAR	"	125-565-18			"	18
2	SIDE " "	"	125-565-19			"	19
2	HALF BEARER BAR	W.I.			FASTENED TOGETHER WITH SINGLE BUTTSTRAPS.	"	20
3	BEARER BAR SUPPORT	W.I.				"	21
1	DOOR ELLIPTICAL	S			$16\frac{1}{2}$" x $11\frac{1}{2}$" x $\frac{1}{4}$"	"	22
1	BAFFLE "	"			13" x 9" x $\frac{1}{4}$"	"	23
2	HINGES	W.I.				"	24
1	HINGE BRACKET.	"				"	25
1	" PIN.	"				"	26
1	LATCH	"				"	27
1	GUARD	"				"	28
1	CATCH	"				"	29
1	BOLT	"				"	30
5	$\frac{3}{4}$" GAS PIPE	W.I. STD.			1" LONG	"	31
1	DOOR RING	W.I.				"	32
2	REINFORCING PLATE	S.				"	33
1	" "	"			ORD. ON B/M 125-565-1	"	34
1	DOOR IN HOOD	"			$13\frac{1}{2}$" x $9\frac{1}{2}$" x $\frac{1}{8}$"	"	35
1	CLAMP	W.I.			$1\frac{1}{2}$" x $\frac{1}{8}$" x 22" LONG	"	36
2	CLIP	"				"	37
1	ASH PIT DOOR	STEEL				"	38
1	" " HANDLE	W.I.				"	39
1	" " ANGLE	STEEL			2" x 2" x $\frac{1}{4}$" x $19\frac{1}{4}$" LONG.	"	40
1	REINFORCING PLATE	"			ORD. ON B/M 125-565-1	"	41
1	REINFORCING PLATE	"			"	"	45
3	" "	"			"	"	46
1	" "	"			"	"	47
1	" "	"			"	"	51
1	" "	"			TAKE FROM PLATE CUT OUT OF SHELL FOR FIRE DOOR OPENING	"	52
4	PAD	C.S.	125-565-55			"	55

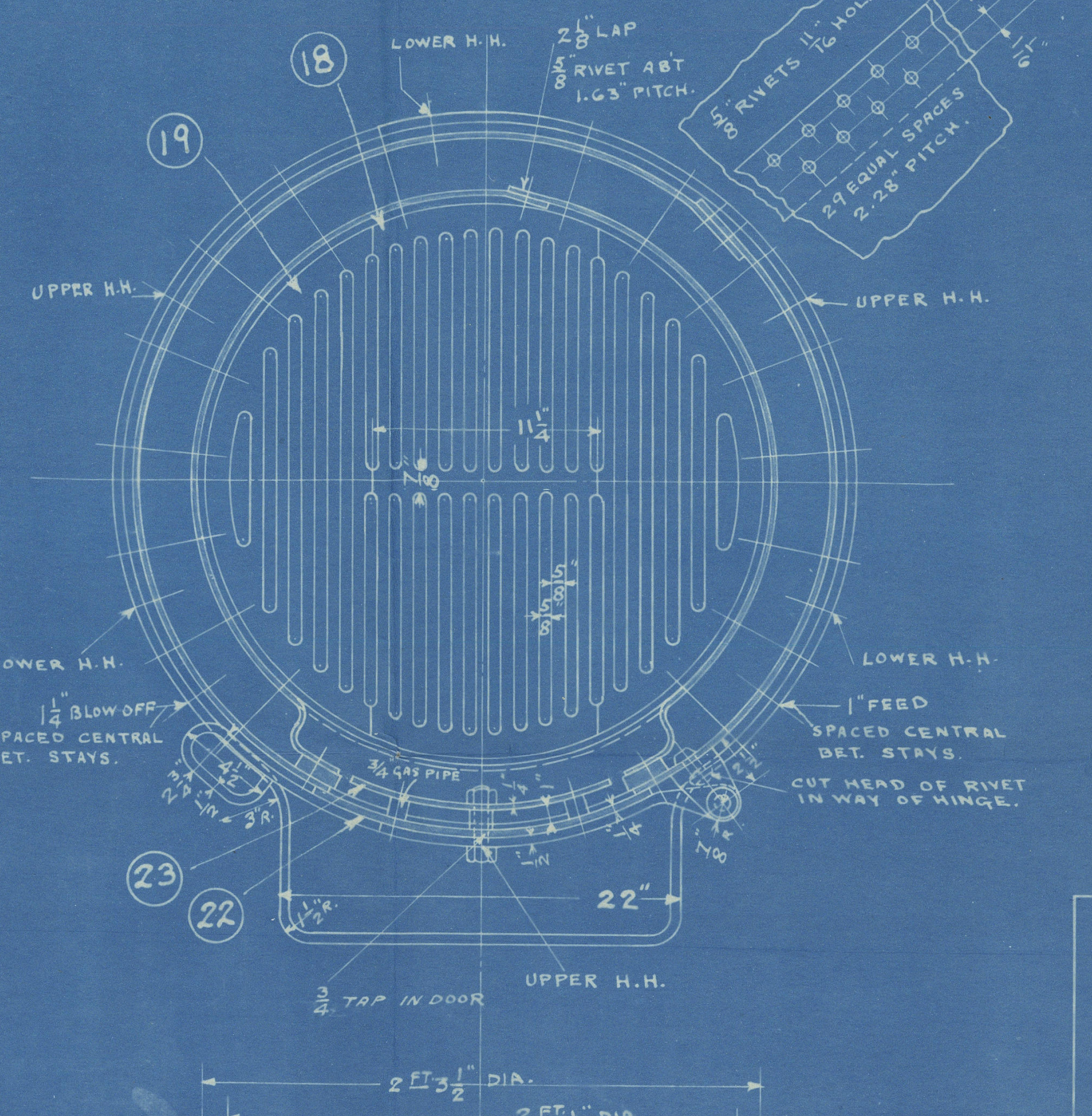


$13\frac{1}{2}$" DOOR
12" OPENING
$9\frac{1}{2}$" DOOR
8" OPENING
18"
2"
$\frac{1}{8}$" PLATE.
35
36
37

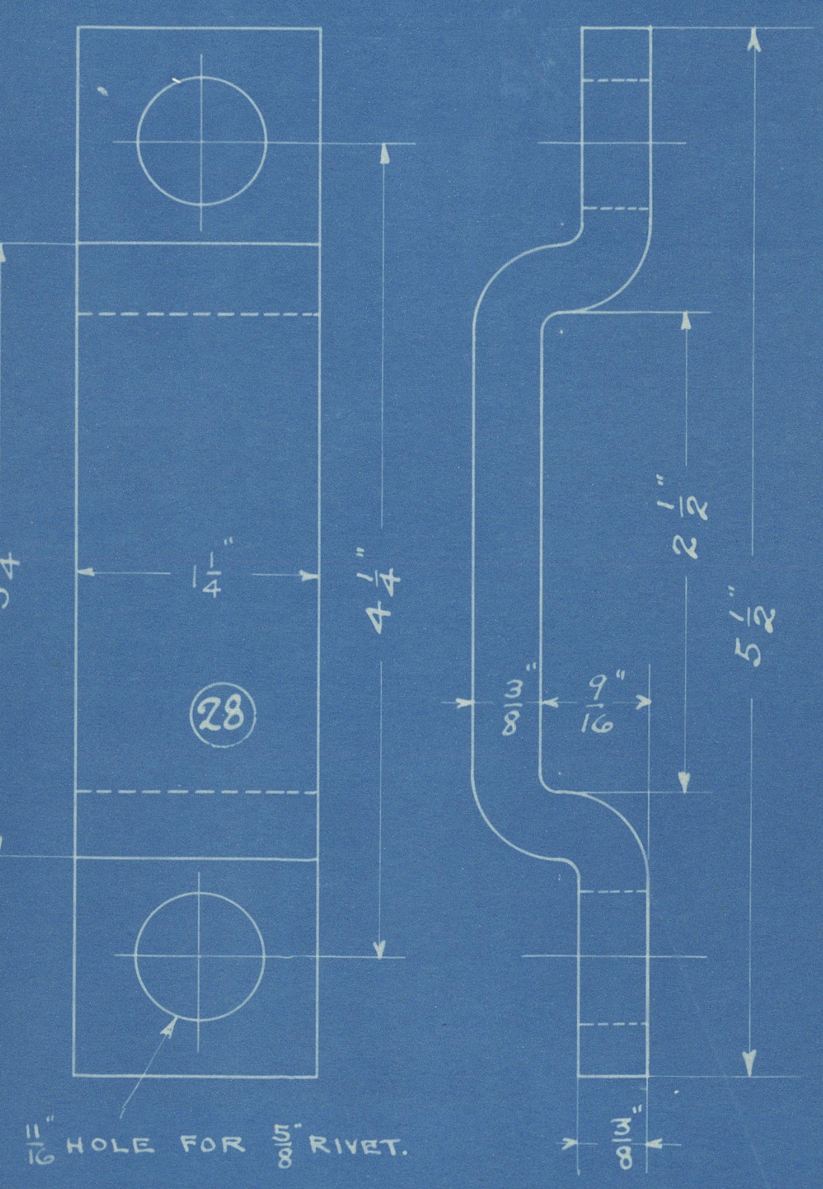
DOOR IN HOOD.



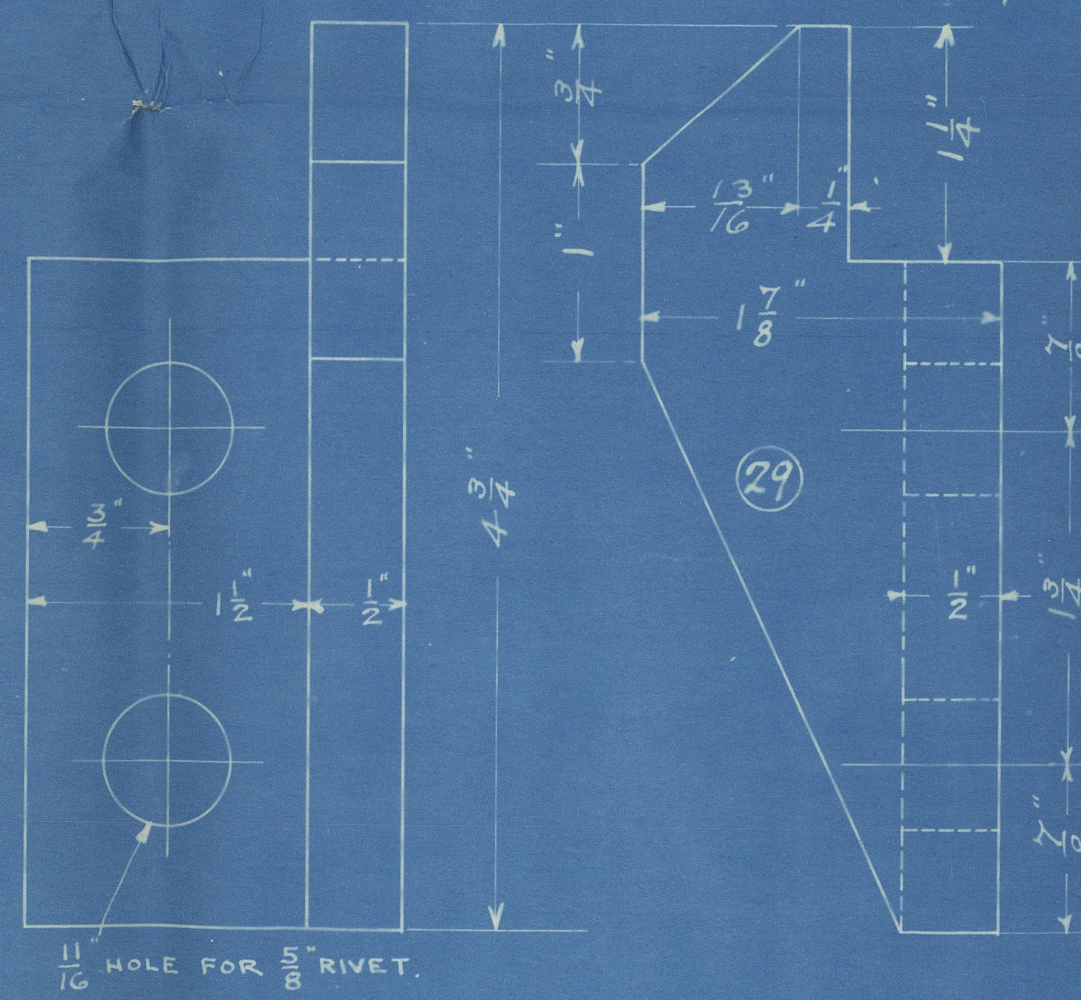
$8\frac{1}{2}$"
45°
$\frac{5}{8}$" RIVETS
2" PIPE TAP FOR SAFETY VALVE.
33
2" PIPE TAP FOR STEAM CONN.
RIVETS.
$2\frac{3}{4}$" x 4" HAND HOLE FOR FUSIBLE PLUG.
℄ OF 8" x 12" DOOR IN HOOD.



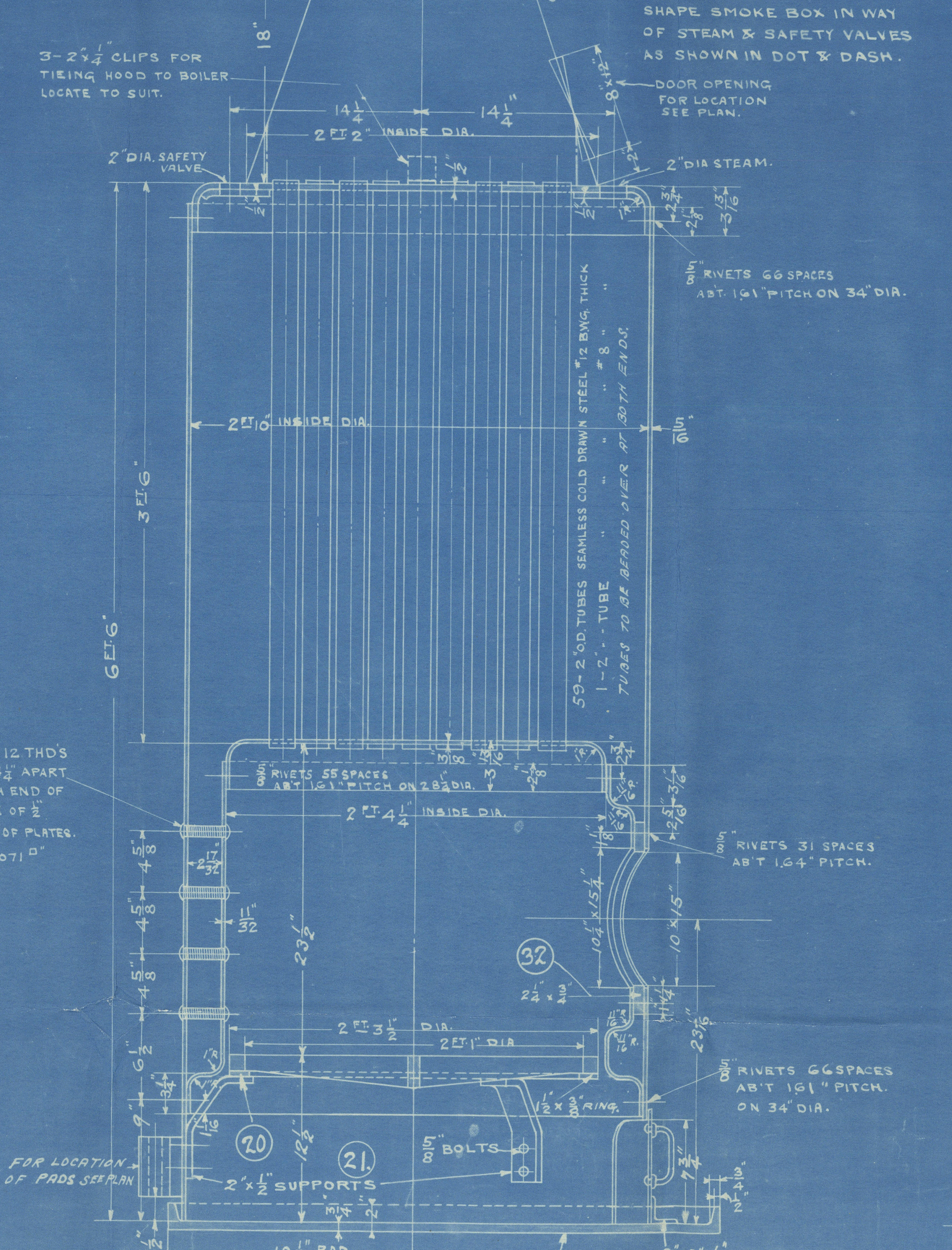
18
19
LOWER H.H.
$2\frac{3}{4}$" LAP
$\frac{5}{8}$" RIVET ABT 1.65" PITCH.
UPPER H.H.
LOWER H.H.
$1\frac{1}{2}$" BLOW OFF.
SPACED CENTRAL BET. STAYS.
1" FEED
SPACED CENTRAL BET. STAYS.
CUT HEAD OF RIVET IN WAY OF HINGE.
23
22
22"
UPPER H.H.
$\frac{3}{4}$" TAP IN DOOR



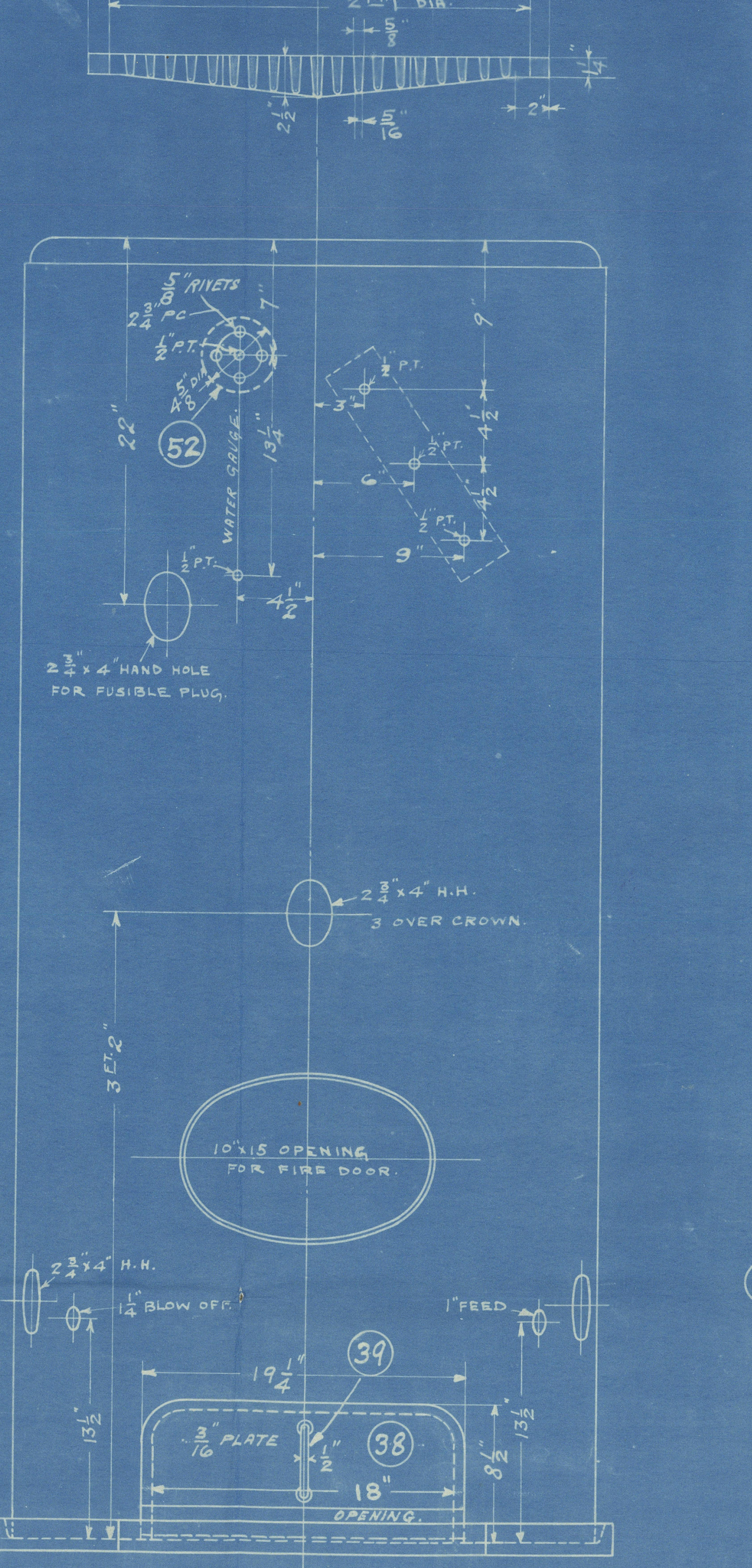
28
$\frac{11}{16}$" HOLE FOR $\frac{5}{8}$" RIVET.



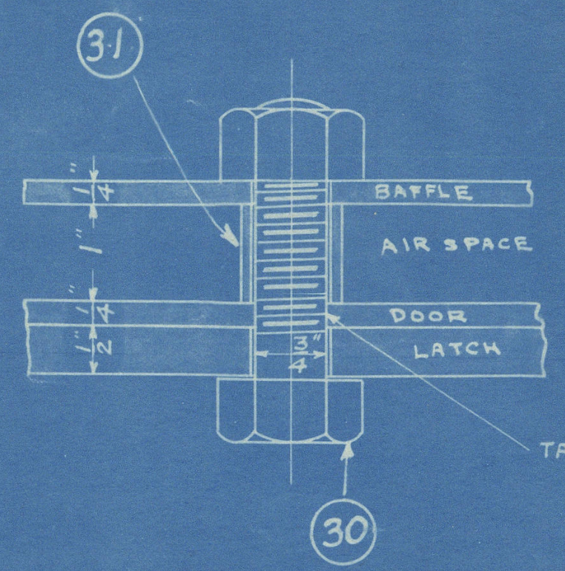
29
$\frac{11}{16}$" HOLE FOR $\frac{5}{8}$" RIVET.



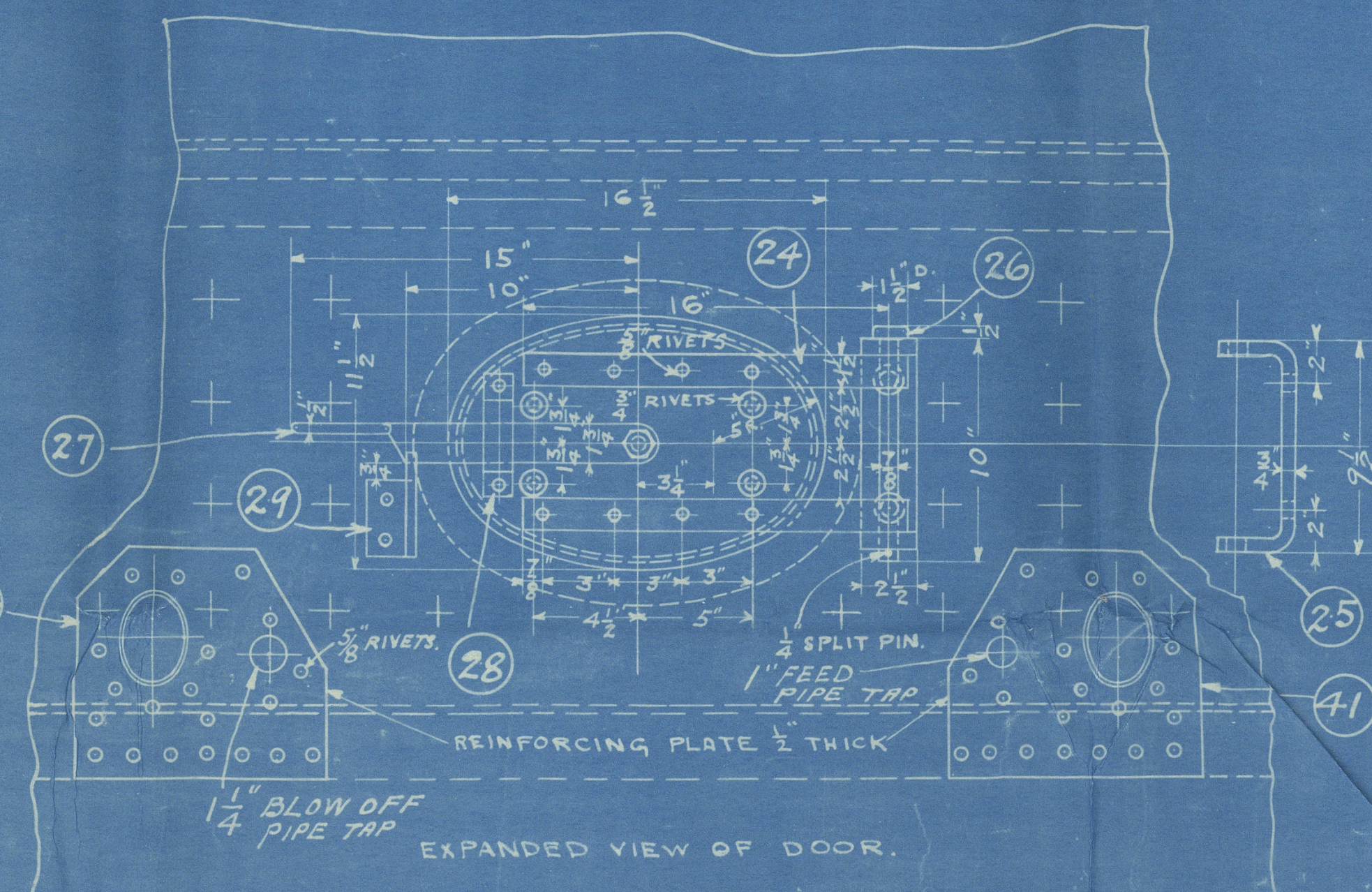
14" INS. DIA.
53
$\frac{1}{8}$" PLATE.
18"
3-2" x $\frac{1}{4}$" CLIPS FOR TIEING HOOD TO BOILER LOCATE TO SUIT.
SHAPE SMOKE BOX IN WAY OF STEAM & SAFETY VALVES AS SHOWN IN DOT & DASH.
DOOR OPENING FOR LOCATION SEE PLAN.
$14\frac{1}{4}$"
2 FT 2" INSIDE DIA.
2" DIA. SAFETY VALVE
2" DIA STEAM.
$\frac{5}{8}$" RIVETS 66 SPACES ABT. 1.61" PITCH ON 34" DIA.
2 FT 10" INSIDE DIA.
3 FT 6"
6 FT 6"
59-2" O.D. TUBES SEAMLESS COLD DRAWN STEEL #12 B.W.G. THICK
1-2" - TUBE " " " " #8 "
TUBES TO BE BEADED OVER AT BOTH ENDS.
$\frac{7}{8}$" DIA. SCREWED STAYS 12 THD'S PER INCH 17 SPACED $4\frac{5}{8}$" APART $\frac{1}{8}$" HOLE DRILLED IN EACH END OF EACH STAY TO A DEPTH OF $\frac{1}{2}$" BEYOND INSIDE SURFACE OF PLATES.
NET AREA OF STAY .4071 □"
$\frac{5}{8}$" RIVETS 55 SPACES ABT 1.61" PITCH ON $28\frac{3}{4}$" DIA.
2 FT $4\frac{1}{4}$" INSIDE DIA.
$\frac{5}{8}$" RIVETS 31 SPACES AB'T 1.64" PITCH.
$10\frac{1}{4}$" x $15\frac{1}{4}$"
10" x 15"
32
$2\frac{1}{4}$" x $\frac{3}{4}$"
$23\frac{1}{2}$"
2 FT $3\frac{1}{2}$" DIA.
2 FT 1" DIA
$\frac{5}{8}$" RIVETS 66 SPACES AB'T 1.61" PITCH. ON 34" DIA.
$1\frac{1}{2}$" x $\frac{3}{8}$" RING.
20
21
$\frac{5}{8}$" BOLTS
2" x $\frac{1}{2}$" SUPPORTS
FOR LOCATION OF PADS SEE PLAN
$18\frac{1}{2}$" RAD.
17
2" x 2" x $\frac{1}{4}$"
40



2 FT $3\frac{1}{2}$" DIA.
2 FT 1" DIA.
$\frac{5}{8}$" RIVETS
52
$2\frac{3}{4}$" x 4" HAND HOLE FOR FUSIBLE PLUG.
$2\frac{3}{4}$" x 4" H.H. 3" OVER CROWN.
10" x 15" OPENING FOR FIRE DOOR
$1\frac{1}{2}$" BLOW OFF.
1" FEED
39
38
$\frac{3}{8}$" PLATE
18"
OPENING



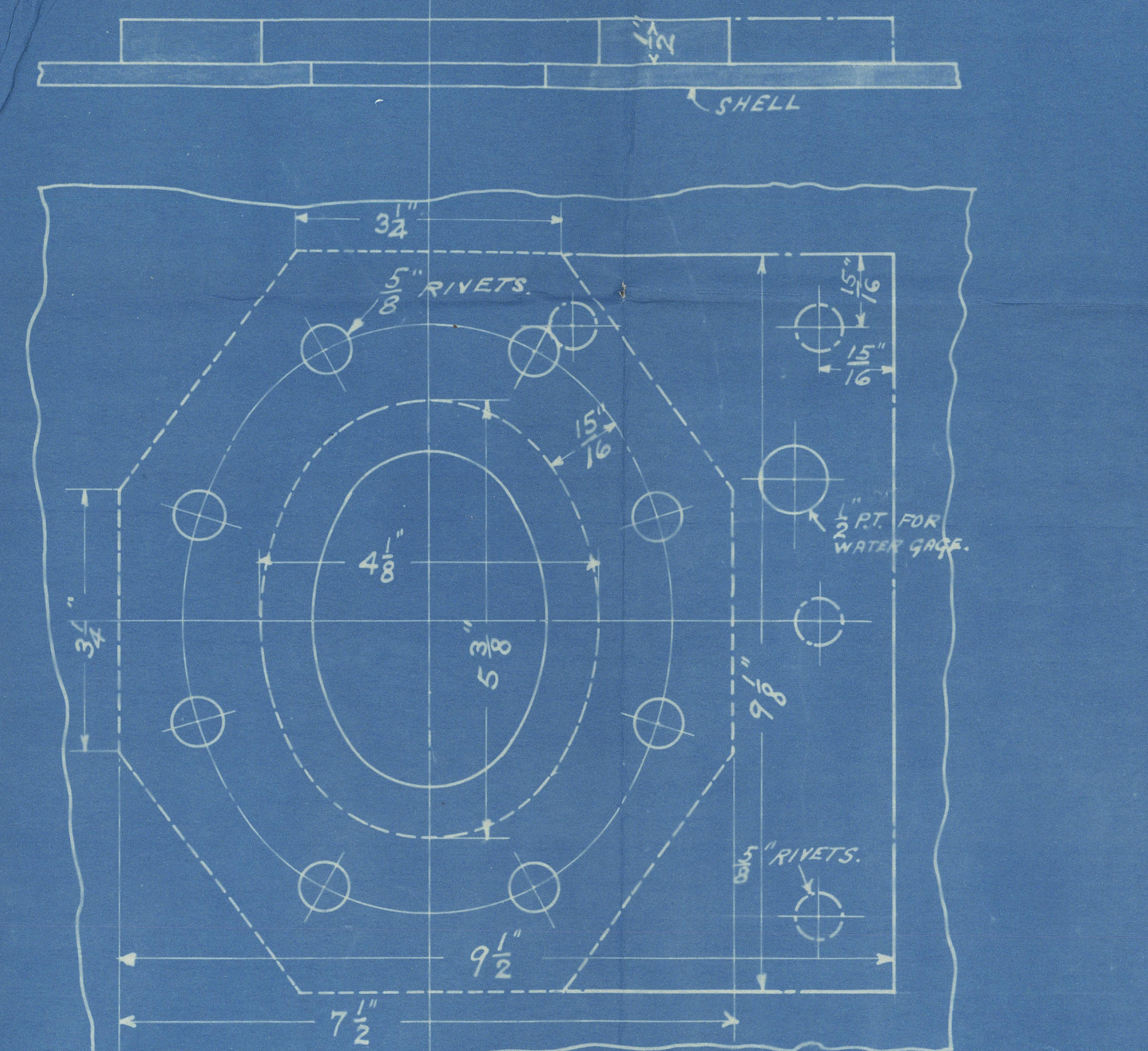
31
BAFFLE
AIR SPACE
DOOR
LATCH
TAP THRO DOOR
30



27
24
26
29
28
25
34
41
$\frac{5}{8}$" RIVETS
$\frac{3}{4}$" SPLIT PIN
1" FEED PIPE TAP
$1\frac{1}{2}$" BLOW OFF PIPE TAP
REINFORCING PLATE $\frac{1}{4}$" THICK

EXPANDED VIEW OF DOOR.

FOR CONT. 156/157 SEE B/M 156/157-641-

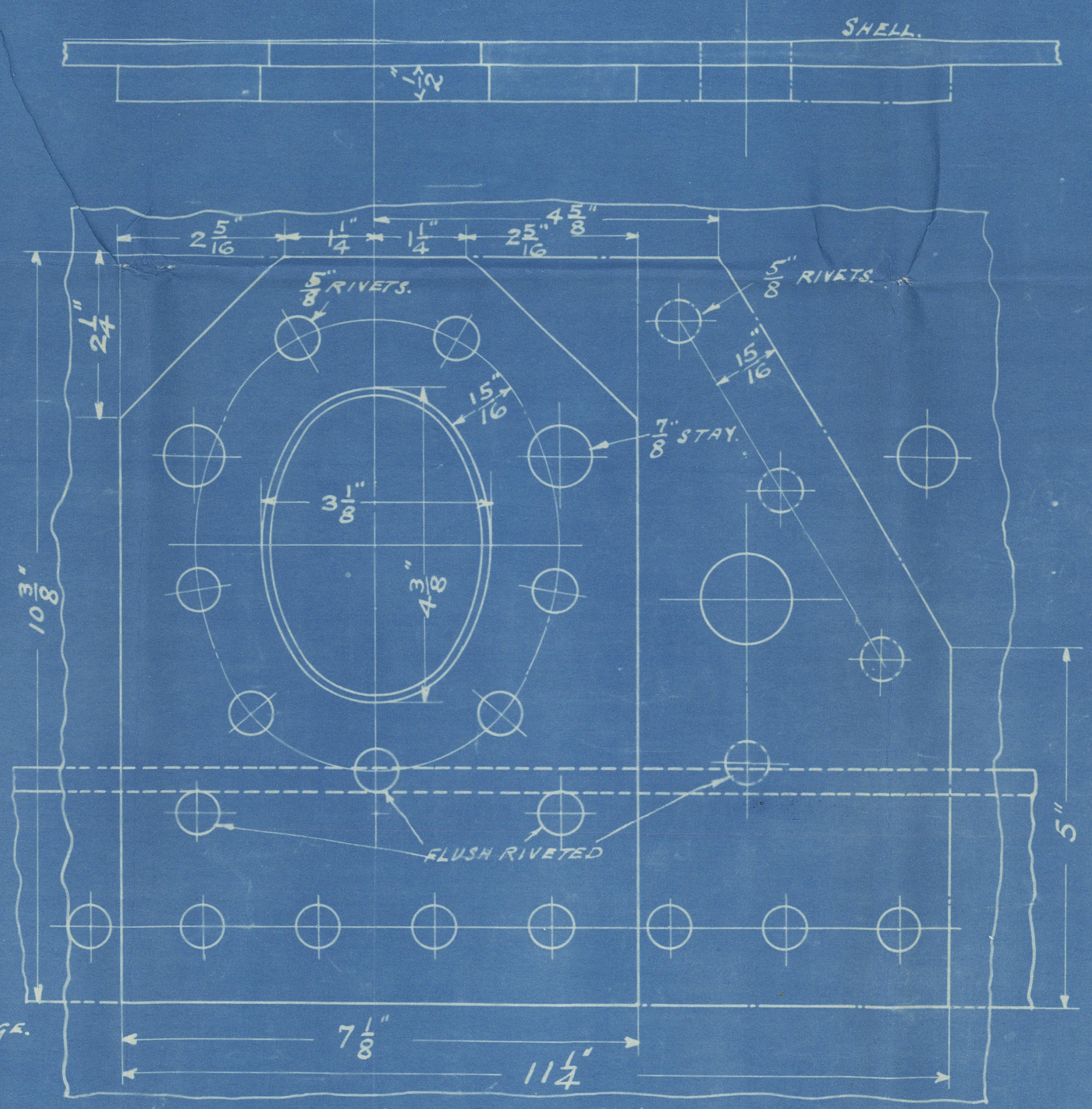


SHELL
$\frac{5}{8}$" RIVETS.
$\frac{5}{8}$" RIVETS.
$9\frac{1}{2}$"
$7\frac{1}{2}$"

EXPANDED VIEW.

㊻ REINFORCE PAD AS SHOWN IN DOTTED LINES FOR HANDHOLE OVER CROWN

(51) " " " " " DOT & DASH " " H.H. FOR FUSIBLE PLUG & WATER GAGE.



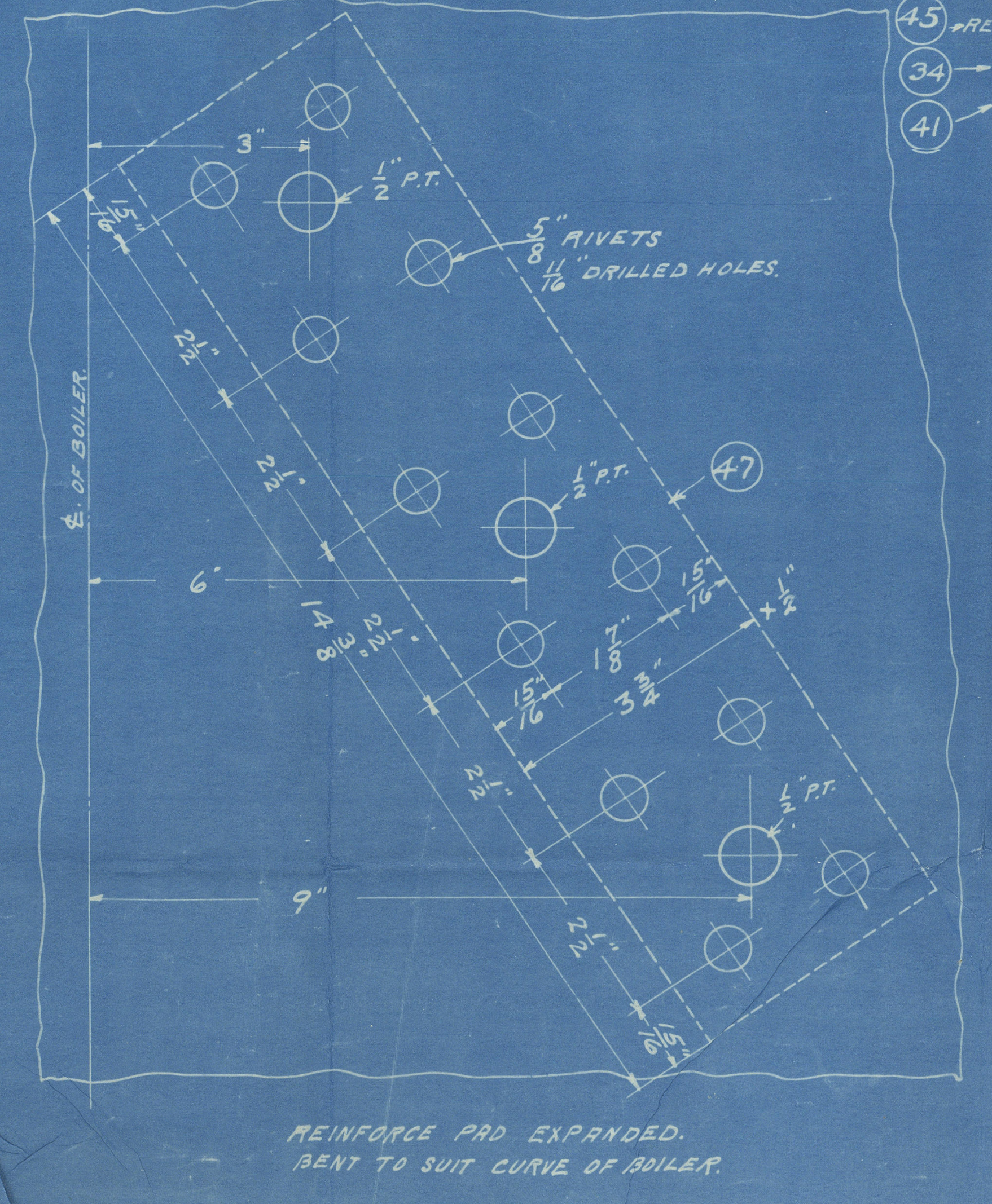
SHELL.
$\frac{5}{8}$" RIVETS.
RIVETS
FLUSH RIVETED
5"
$7\frac{1}{8}$"
$11\frac{1}{4}$"

EXPANDED VIEW.

㊺ REINFORCE PAD AS SHOWN IN FULL LINES FOR LOWER HAND HOLE.

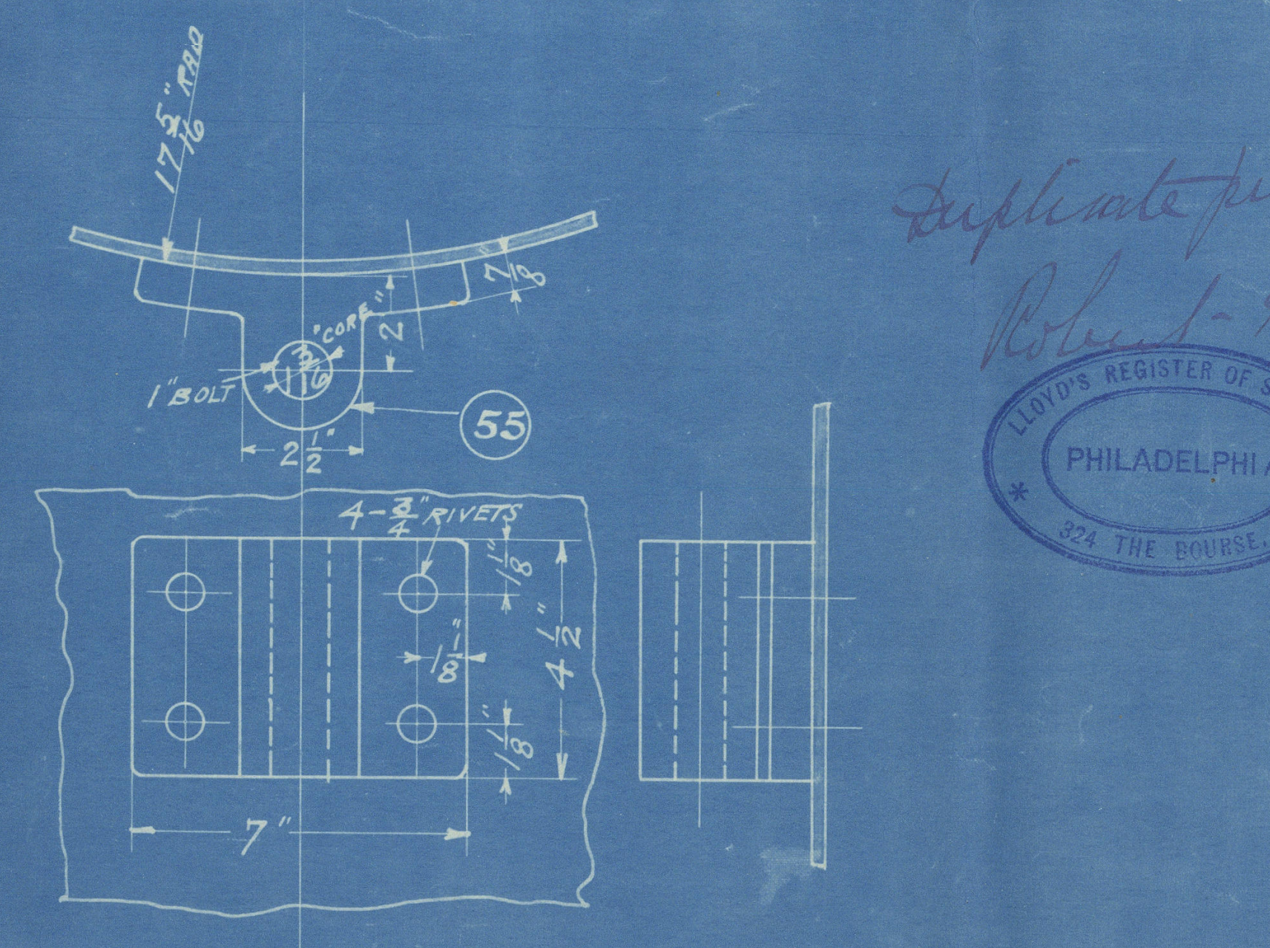
㉞ " " " " " DOT & DASH " " " " & BLOW OFF

㊶ " " TO OTHER HAND IN DOT & DASH FOR " " " " FEED.



3"
$1\frac{1}{2}$" P.T.
$\frac{5}{8}$" RIVETS
$\frac{11}{16}$" DRILLED HOLES.
47
1" P.T.
6"
9"
℄ OF BOILER

REINFORCE PAD EXPANDED: BENT TO SUIT CURVE OF BOILER.



$17\frac{5}{16}$" RAD
$\frac{7}{8}$
"CORE"
2
1" BOLT
$1\frac{3}{16}$
55
$2\frac{1}{2}$"
4-$\frac{3}{4}$" RIVETS
$1\frac{1}{8}$"
$4\frac{1}{2}$"
7"

Duplicate print -
Robert Haig

LLOYD'S REGISTER OF SHIPPING
PHILADELPHIA
324 THE BOURSE.

FOR 156/157
34 LIB 1
35 9 1
36 26 1
37 27 1
38-39 29 2
40 42 1
41-46 46 2
13
6 Jan-14 Pa

19 LIB 1
20 9 1
21 27 1
22-23 29 2
24 42 1
25 26 1
26-27 46 2
15 My. 12. Pg
28 [illegible]
21 [illegible]
29 LONDON
22 [illegible]
30-31 DRAKE L
26 [illegible]
32-33 KENNEDY
16 N 12

1 [illegible] 1
14 N 11
2-3 KENNEDY 2
4-5 LIB I. 2
16 N 11
6 8 HAIG 3
17 N 11
9 9 OK 1
18 N 11
10 LIB 1
11 9 1
12 27 1
13-14 29 2
15 42 1
16-17 46 2
18 26 1
8 Jan. 12. Pg

ENGINE DEPARTMENT

TITLE

AUXILIARY BOILER 2 FT 10" INSIDE DIA.

BY 6 FT 6" HIGH. 120 LBS. PRESS.

SCALE $1\frac{1}{2}$"-3"-6"-12" = 1 FT. DRAWN BY 223 DATE 6-JAN-12

TRACED BY 223 CHECKED BY 221 CHIEF DRAFTSMAN Pmy

NEW YORK SHIPBUILDING COMPANY.

CAMDEN NEW JERSEY, U.S.A.

DR. # 125-641-1.

APPROVED G L G Lovejoy CHIEF ENGINEER

W301-0140